

THE ARCHITECTS' JOURNAL



standard contents

every issue does not necessarily contain all these contents, but they are the regular features which continually recur

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Wanted and Vacant

No. 3396

[Vol. 131]

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Registered as a Newspaper.

★A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ii one week, II to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

ILA	Institute of Landscape Architects. 1, Park Crescent, Portland Place, W.1.	Museum 3473
I of Arb	Institute of Arbitrators. Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197
IQS	Institute of Quantity Surveyors. 98, Gloucester Place, W.1.	Welbeck 1859
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 68, Gloucester Place, W.1.	Welbeck 9966
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
JFRO	Joint Fire Research Organisation (DSIR & Fire Offices' Committee). Fire Research Station, Boreham Wood, Herts.	Eustree 141797
LDA	Lead Development Association. 18, Adam Street, W.C.2.	Whitehall 4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MAFF	Ministry of Agriculture, Fisheries and Food. Whitehall Place, S.W.1.	Trafalgar 7711
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Hyde Park 7070
MOH	Ministry of Health. 23, Savile Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, W.C.2.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	National Asphaltite Mine Owners and Manufacturers Council. 14 Howick Place, Victoria Street, S.W.1.	Victoria 1600 & 6477
NAS	National Association of Shopfitters. 2, Caxton St., S.W.1.	Abbey 4813
NBR	National Buildings Record. 31, Chester Terrace, Regent's Park, N.W.1.	Welbeck 0619
NCBMP	National Council of Building Material Producers. 10 Storey's Gate, S.W.1.	Abbey 5111
NEFMAI	National Employers Federation of the Mastic Asphaltite Industry. 21, John Adam Street, Adelphi, W.C.2.	Trafalgar 3927
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives. 21, John Adam Street, Adelphi, W.C.2.	Trafalgar 3927
NFHS	National Federation of Housing Societies. 12, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 58, Portland Place, W.1.	Langham 0064/5
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NRDB	Natural Rubber Development Board. Market Buildings, Mark Lane, E.C.3.	Mansion House 9383
NSAS	National Smoke Abatement Society. Palace Chambers, Bridge Street, S.W.1.	Trafalgar 6838
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Fountainbridge 7631
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5533
RICS	Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1.	Whitehall 5322/9245
RFAC	Royal Fine Arts Commission. 5, Old Palace Yard, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSH	Royal Society of Health. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, E.C.3.	Mansion House 3921
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	Langham 1984/5
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1.	Langham 7616
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.2.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent-Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 75, Cannon Street, E.C.4.	City 5040
WDC	War Damage Commission. 6, Carlton House Terrace, S.W.1.	Whitehall 4341
ZDA	Zinc Development Association. 34, Berkeley Square, W.1.	Grosvenor 6636

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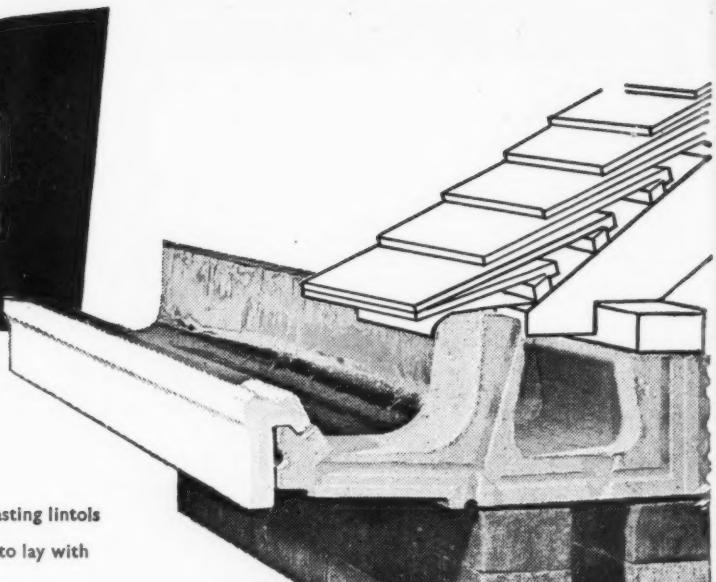
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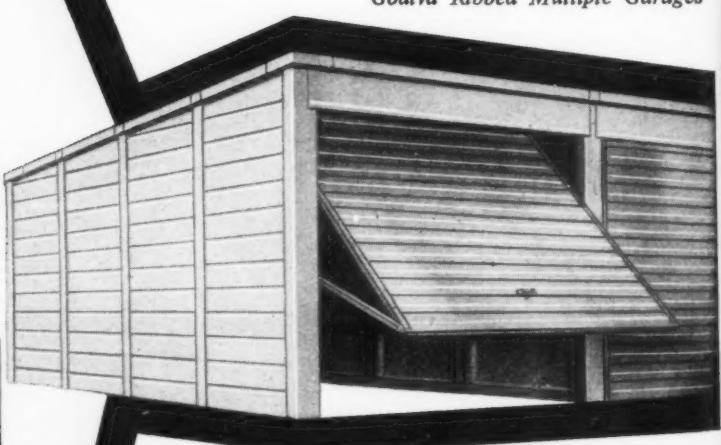
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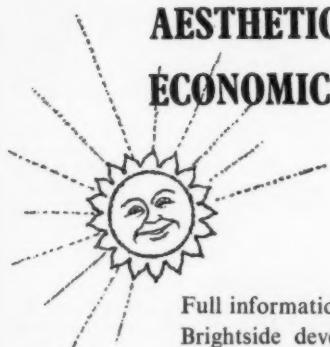
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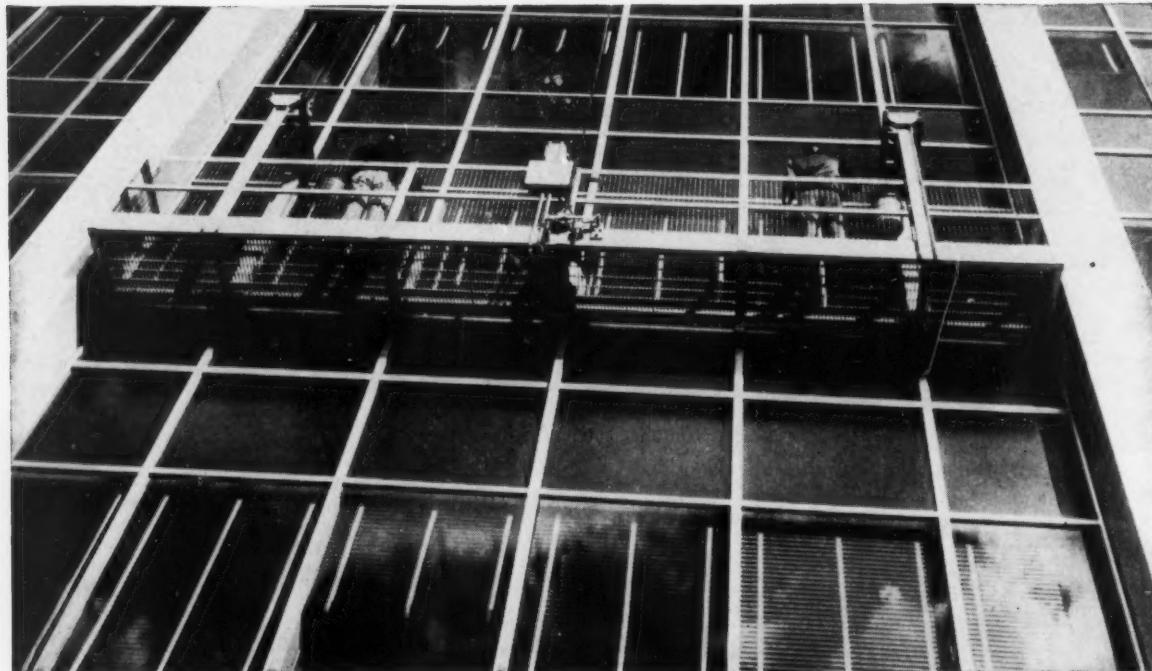
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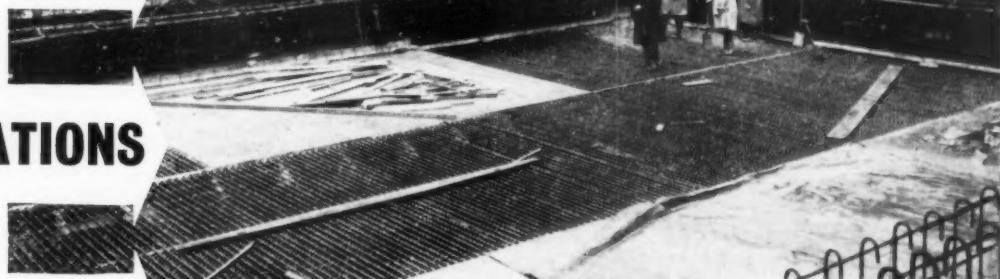
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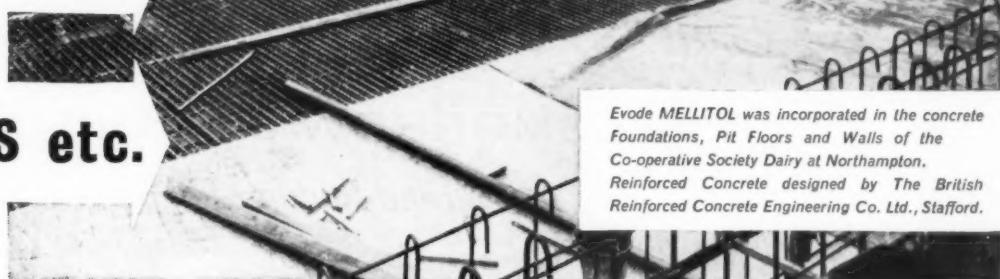
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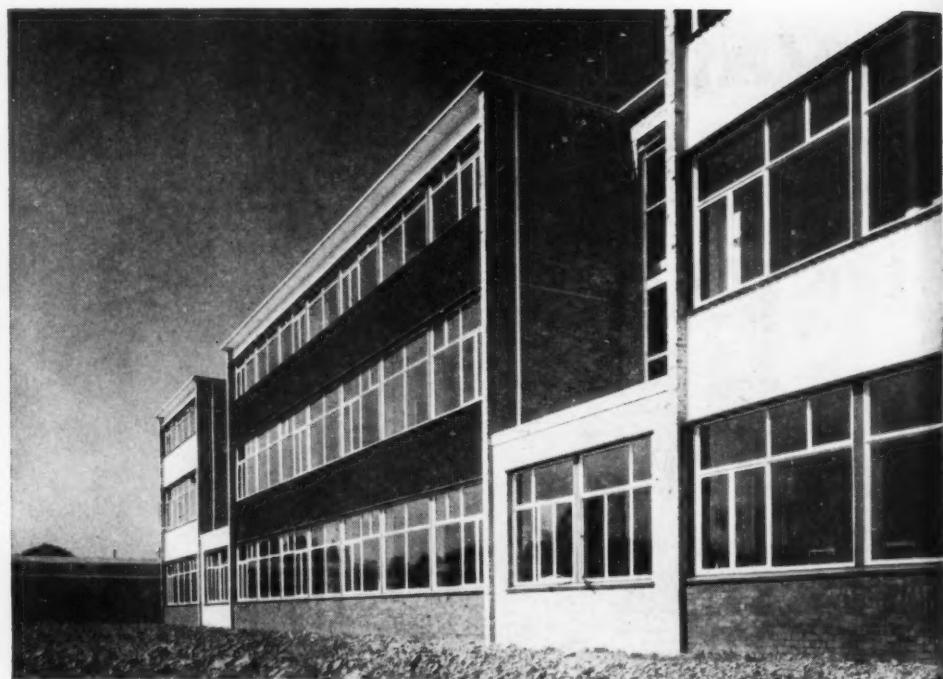
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Architects: Smyth & Cowser, F.R.I.B.A.



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Architects: J.B.F. Cowper & Poole, F.R.I.B.A.





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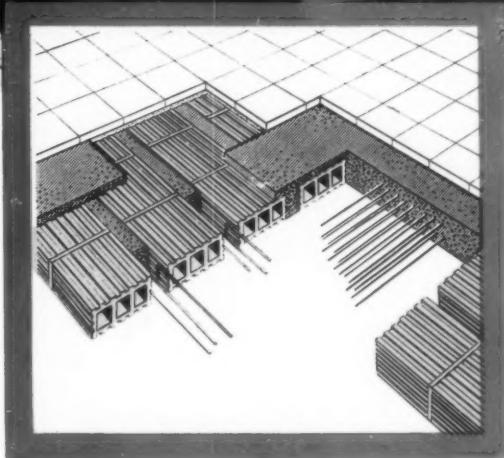
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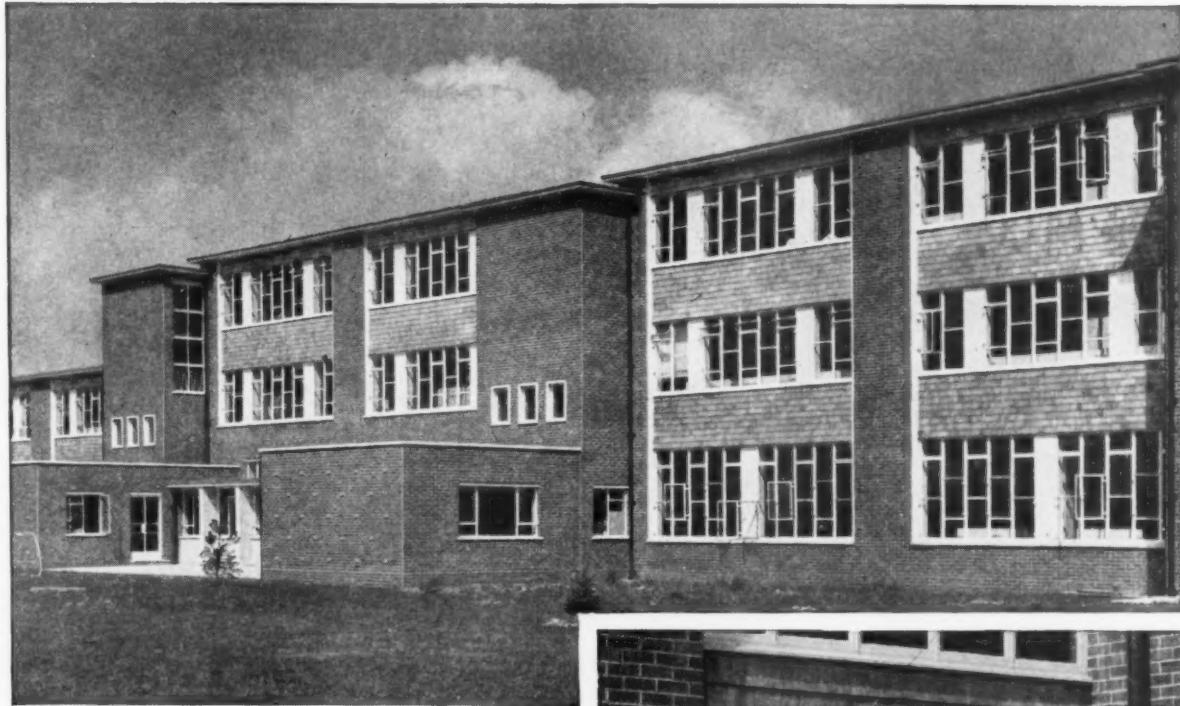
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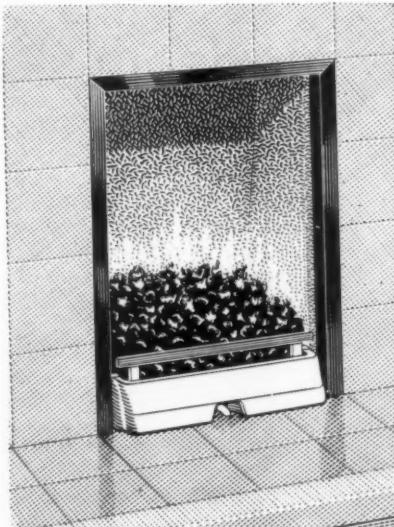
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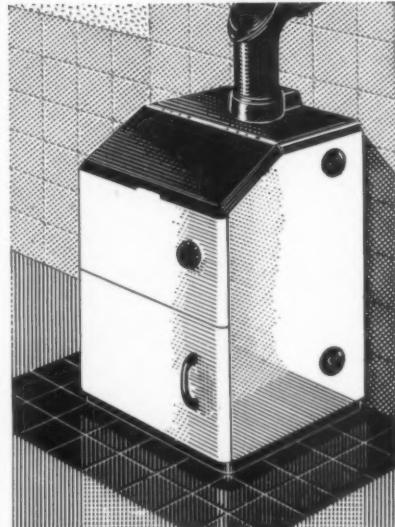
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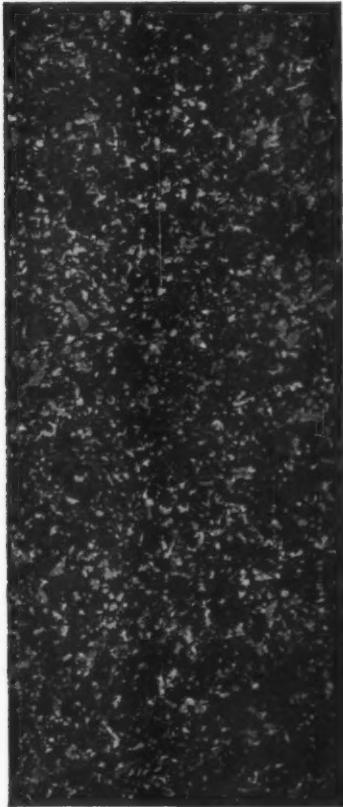
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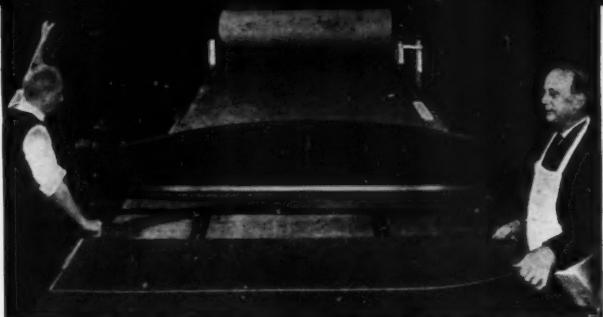
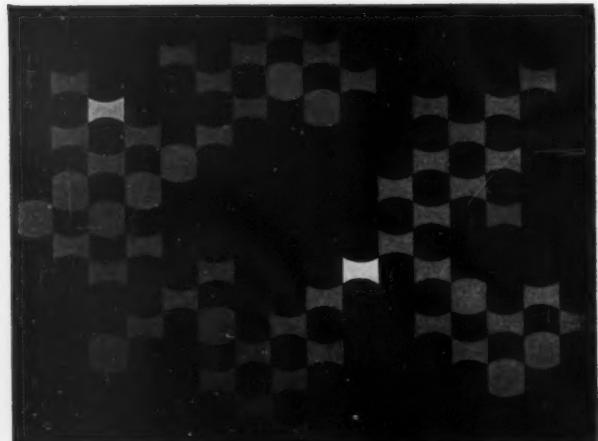
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This is the second in a series of articles designed to interest and inform architects on the techniques and scope of linoleum opportunities open to them with modern linoleum floorcoverings.

linoleum contractors' techniques

To an increasing extent in the last few years, flooring contractors have cut linoleum into tiles instead of laying it in the form of sheet; some of them say that they use tiles for 90% of their work. This article explains some of the reasons for the change and suggests ways in which the architect can turn this new flexibility to advantage.

Linoleum in sheet form is still cheaper to lay when large unobstructed areas are to be covered; but when faced with complex outlines and central pillars, especially in cramped areas, flooring contractors have found that they can install tiles with very little waste of material, and at costs that are competitive with sheet linoleum. It is here that some knowledge of the contractors' techniques and working methods can help the architect to design interesting floors and still keep down costs.



Photos of guillotining and die-cutting: Courtesy E. J. Elgood Ltd.



Cutting tiles The contractor uses a guillotine to cut 'slabs' of linoleum across the roll, wide enough to allow a small margin for trimming the tile later. The tiles themselves can be hand-cut by knife—a slow and expensive process—guillotined, or die-cut.



Guillotining Hand-operated or power-driven guillotines can cut squares, oblongs and triangles almost equally economically.



Die-cutting Some contractors have semi-automatic machines that cut tiles up to 18" square in one movement. These machines also accept special dies to cut other shapes—such as those below—simultaneously with the rectangular tile. (Both parts of the tile should be used in the design to minimise waste.) The design of such shapes should avoid running the shaped cutter into the corner of the tile, where it would create strong side pressures during cutting.





Strip cutting Lacing strips and border strips, in widths ranging from $\frac{1}{2}$ inch to 18 inches, are used to form decorative effects or borders. (For use as borders, they are cut slightly wide to allow for fitting to irregularities of the wall line.) The cutting machine slices almost through the thickness of the linoleum to make the strips, which are then finally separated as required by the layer on site.

Economical tile sizes Since linoleum is delivered in rolls 72 inches wide, contractors find the following sizes the most economical to cut:

NOMINAL: * 9 inches, 12 inches, 18 inches, 24 inches, 36 inches.

*Actual sizes are approximately $\frac{1}{4}$ -inch less than the nominal sizes of all-purpose-cut tiles.



THE USES OF SHEET LINOLEUM

This article does not, of course, set out to show that tiles have entirely replaced the traditional way of laying linoleum in sheet form—even where the architect wants to introduce designs in his floor. Below are three ways of using sheet linoleum in individual situations:

Hand-cut designs Linoleum is easier than most floor coverings to cut into individual designs, and cutting by hand offers the designer the greatest possible freedom of treatment in producing a spectacular floor like the one shown below. At such a focal point—it was, in fact, John Piper's 'Baroque Room' in *The Observer's Film Festival*—the extra cost would be amply justified.

Courtesy Design magazine



IM SYMBOL DESIGNED BY RAYMOND LOWKY
Courtesy International Harvester Company of Great Britain Limited

Architects: Albert W. Moore & Son
Flooring Contractors: The Lino-Tile Co. Ltd

Hand-cut motifs Most contractors employ craftsmen who will enjoy reproducing in linoleum a motif like this one, laid in the entrance hall of International Harvester's offices in City Road, London.

Repeated motifs hand-cut by template For special purposes, the contractor can make a hardboard or metal template to cut out several motifs—and the corresponding spaces for them in the background.

NAIRN DESIGN BOOK

A full-colour book illustrating new directions in floor design will soon be available to all interested architects. If you would like to receive a free copy immediately upon publication, please write to: Michael Nairn & Company Limited, P.O. Box 1, Kirkcaldy, Scotland.

NAIRN MELOTONE LINOLEUM

The new range of colours of Nairn Melotone Linoleum, consisting of 8 muted shades with softly blended marking, is illustrated on the right-hand edge of this page, together with a selection of colours from the plain and marble ranges in 4.50 mm gauge. A large selection is also available in 6.70 mm gauge. Please write for information to one of the addresses below or consult your technical representative.

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Technical representatives, based at our offices in different parts of the country, are at your service to give advice or information on all matters concerning floorcovering materials. If you wish to consult one of these representatives, please write or telephone to any of the following offices:

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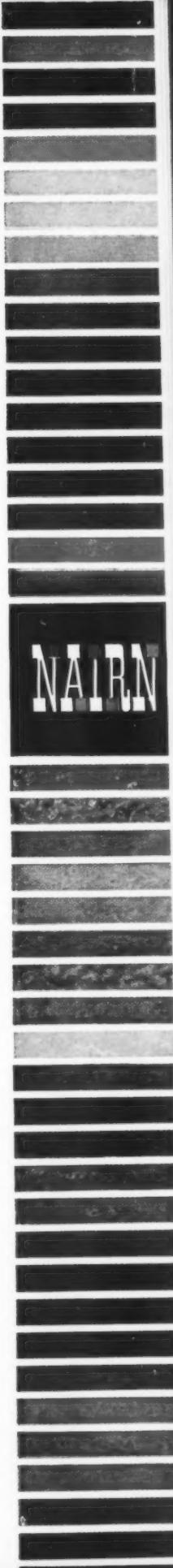
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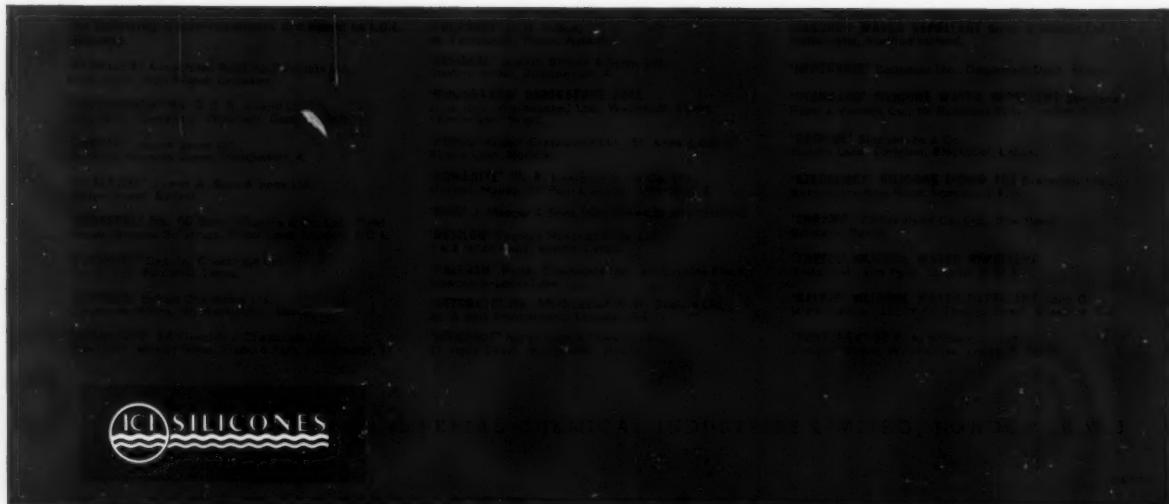
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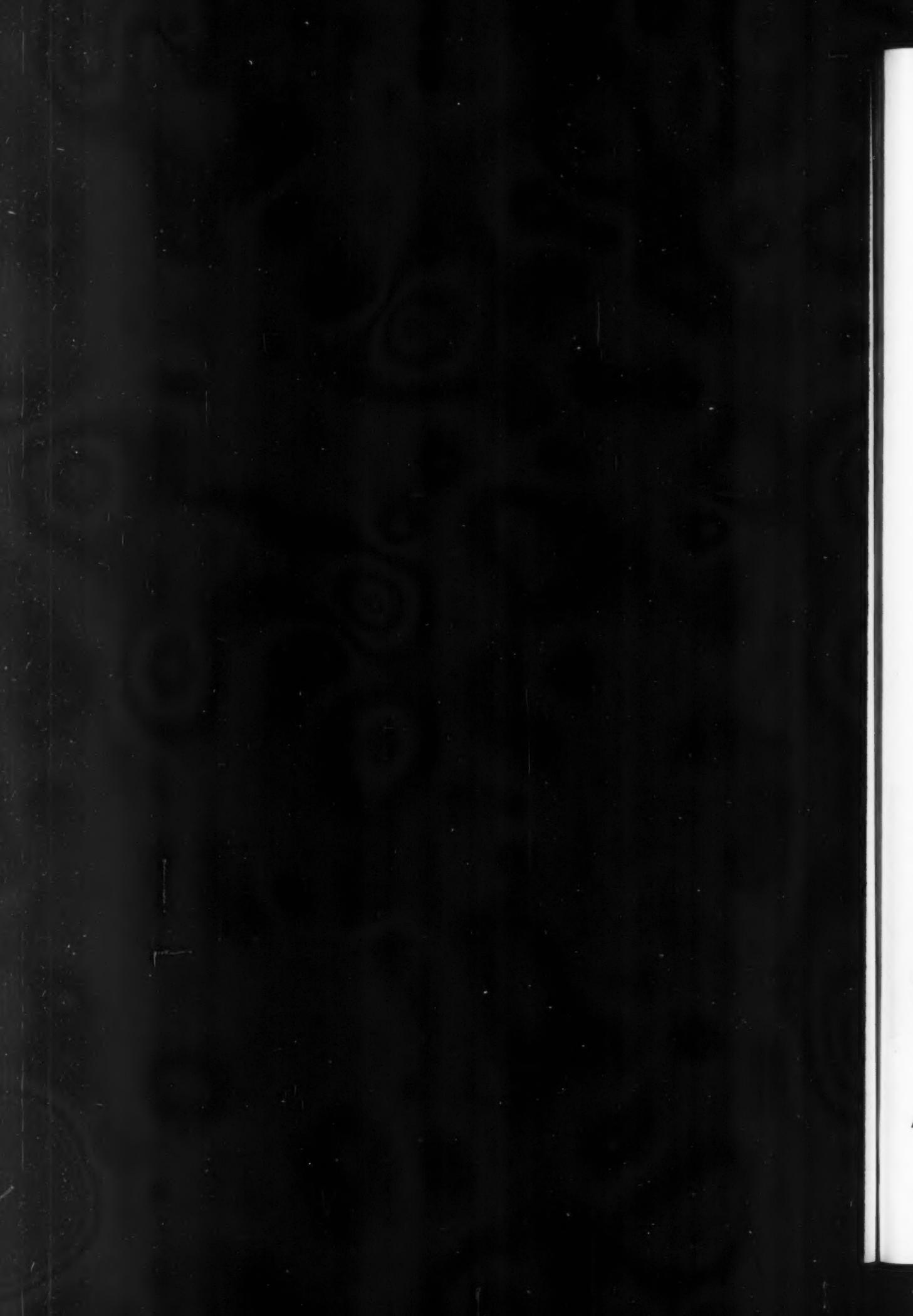


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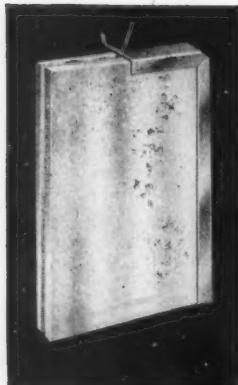
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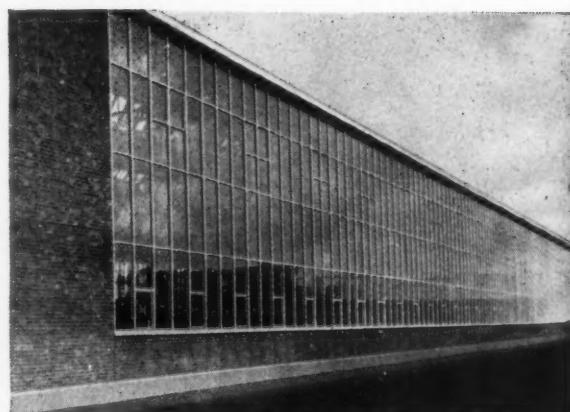
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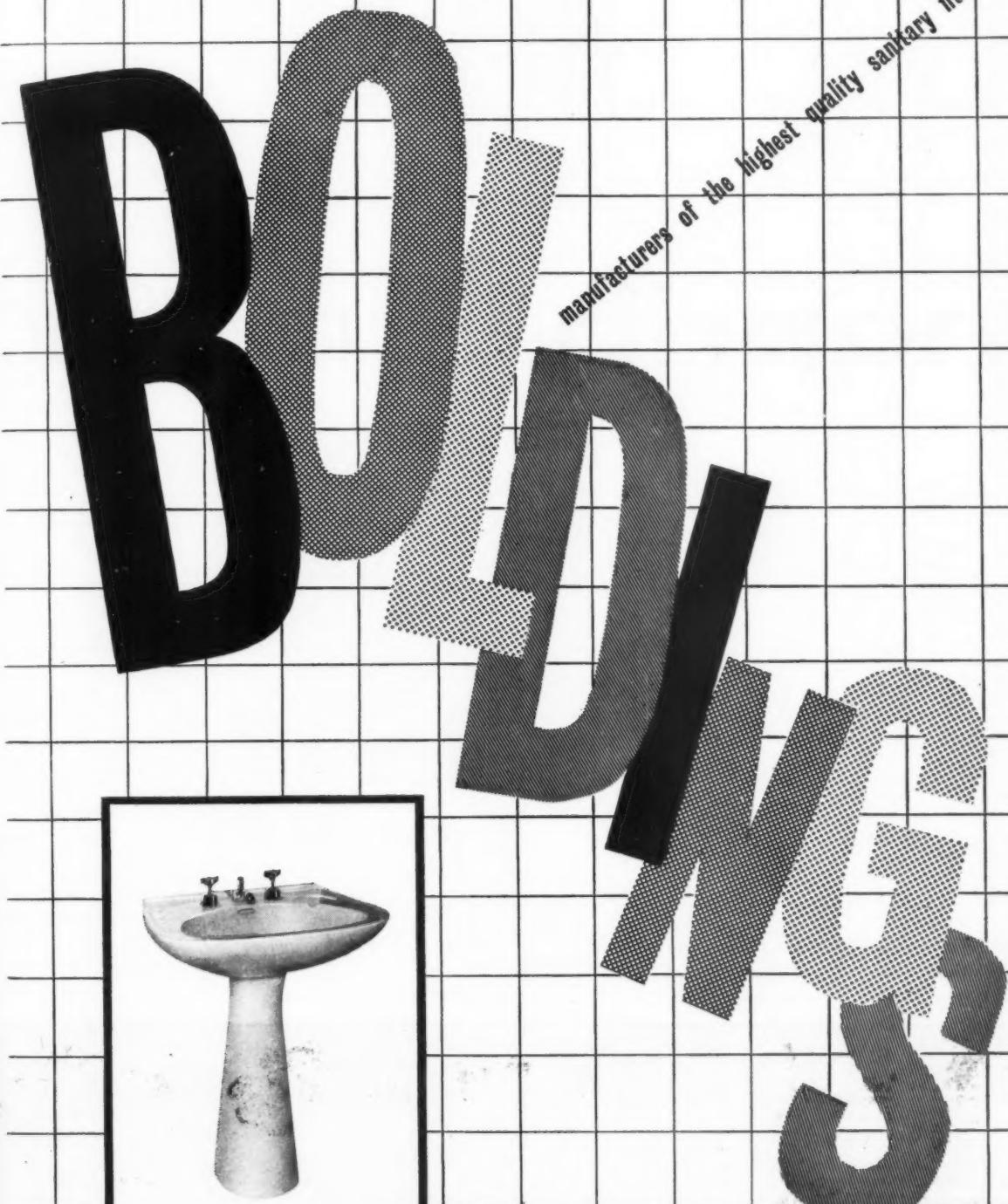
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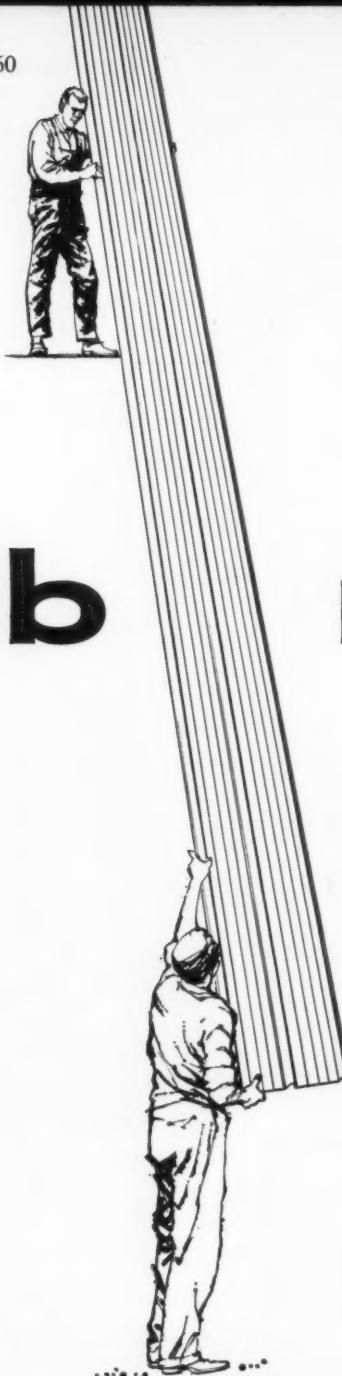
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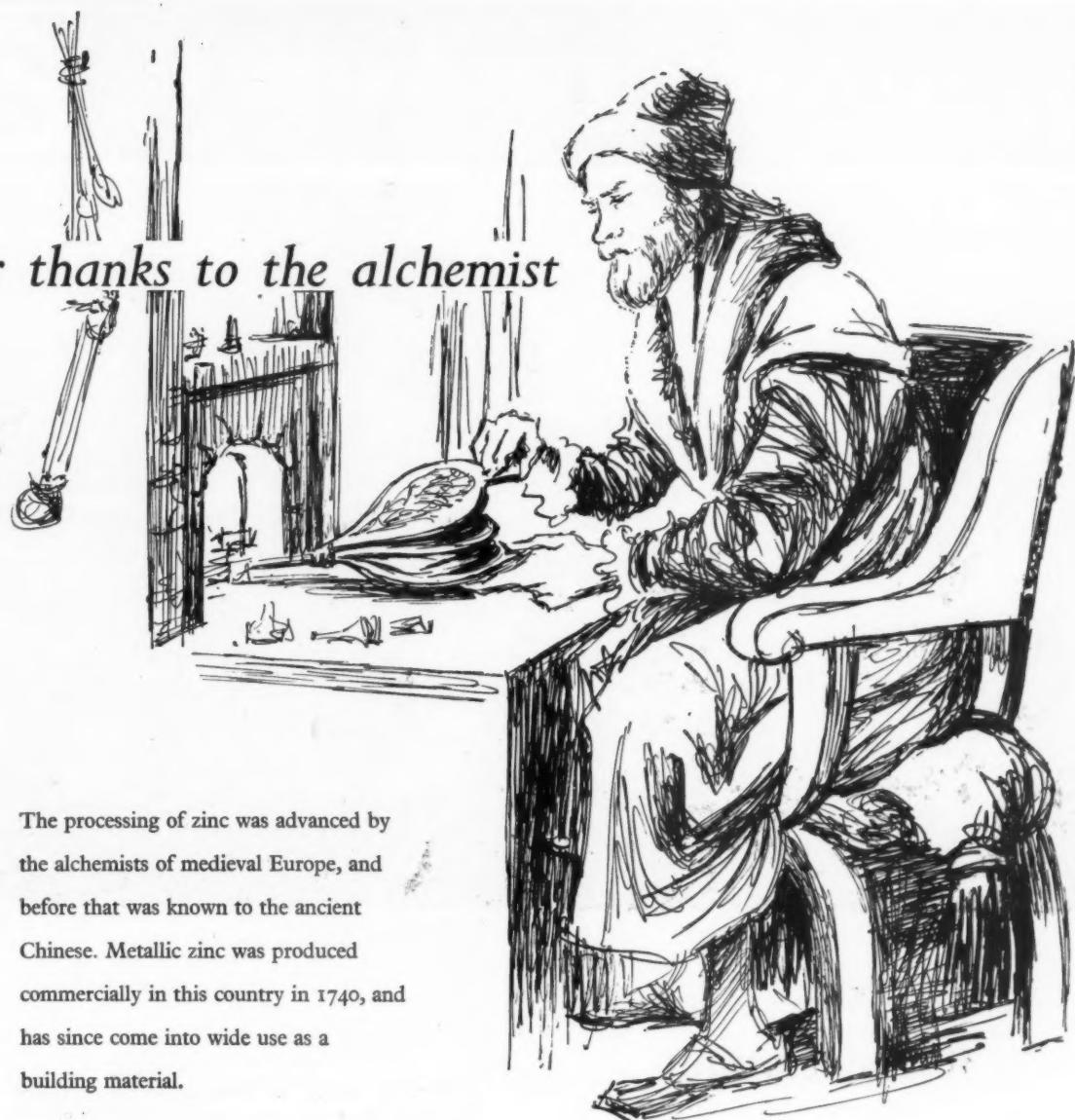
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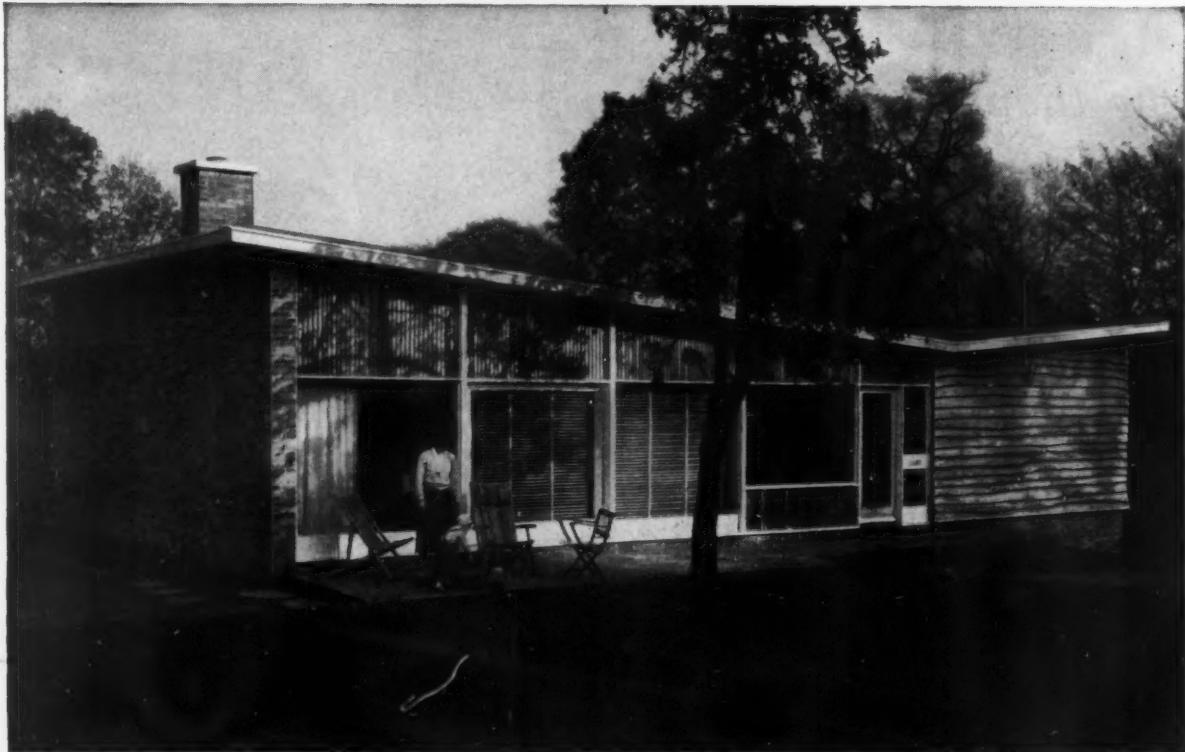
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*'The Orchard,' Bramcote, Notts.
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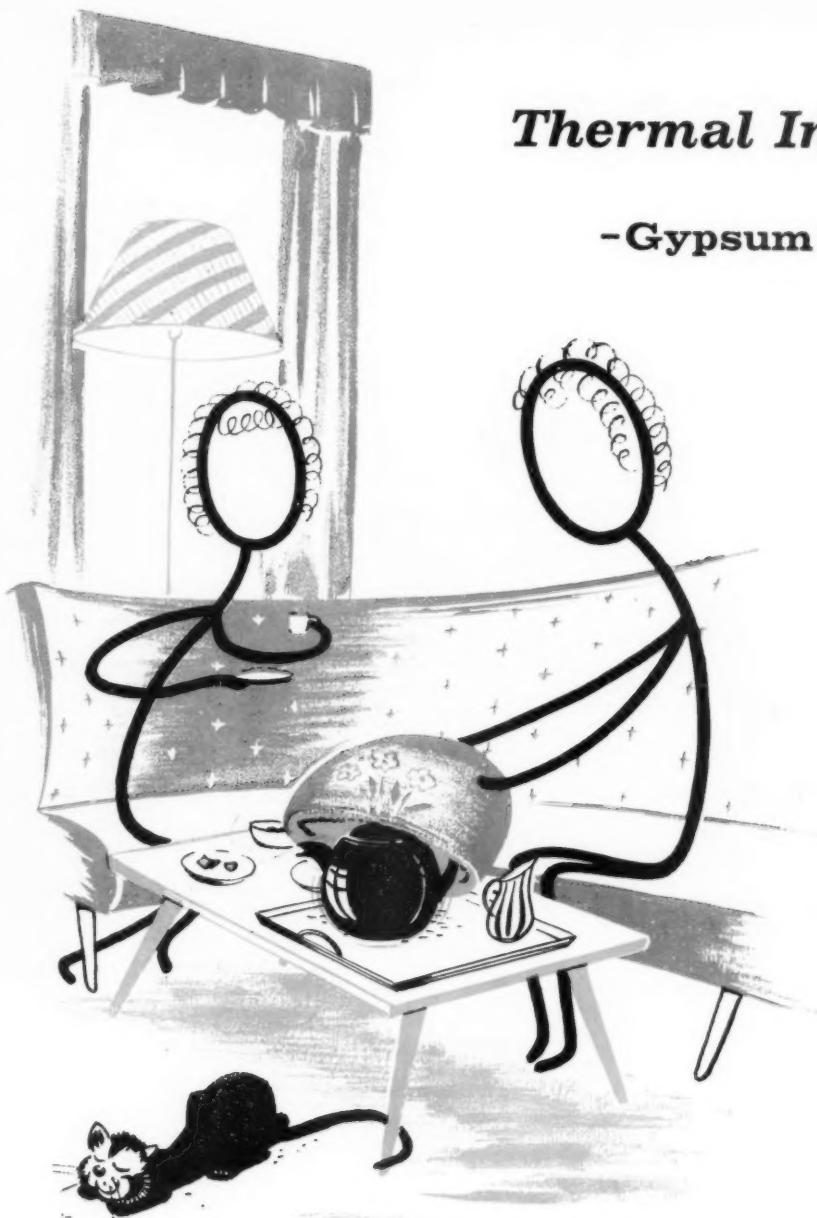
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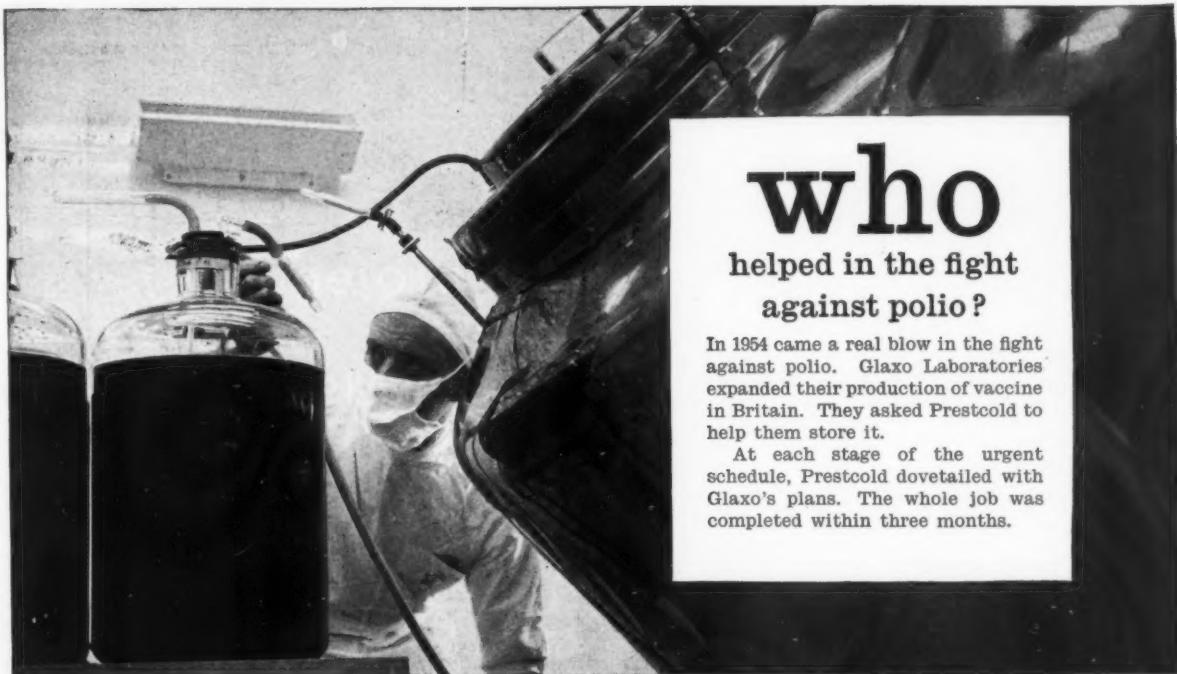
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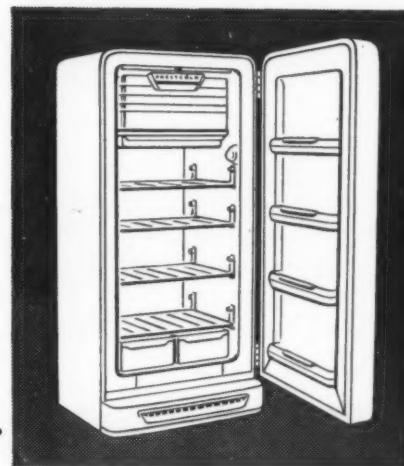
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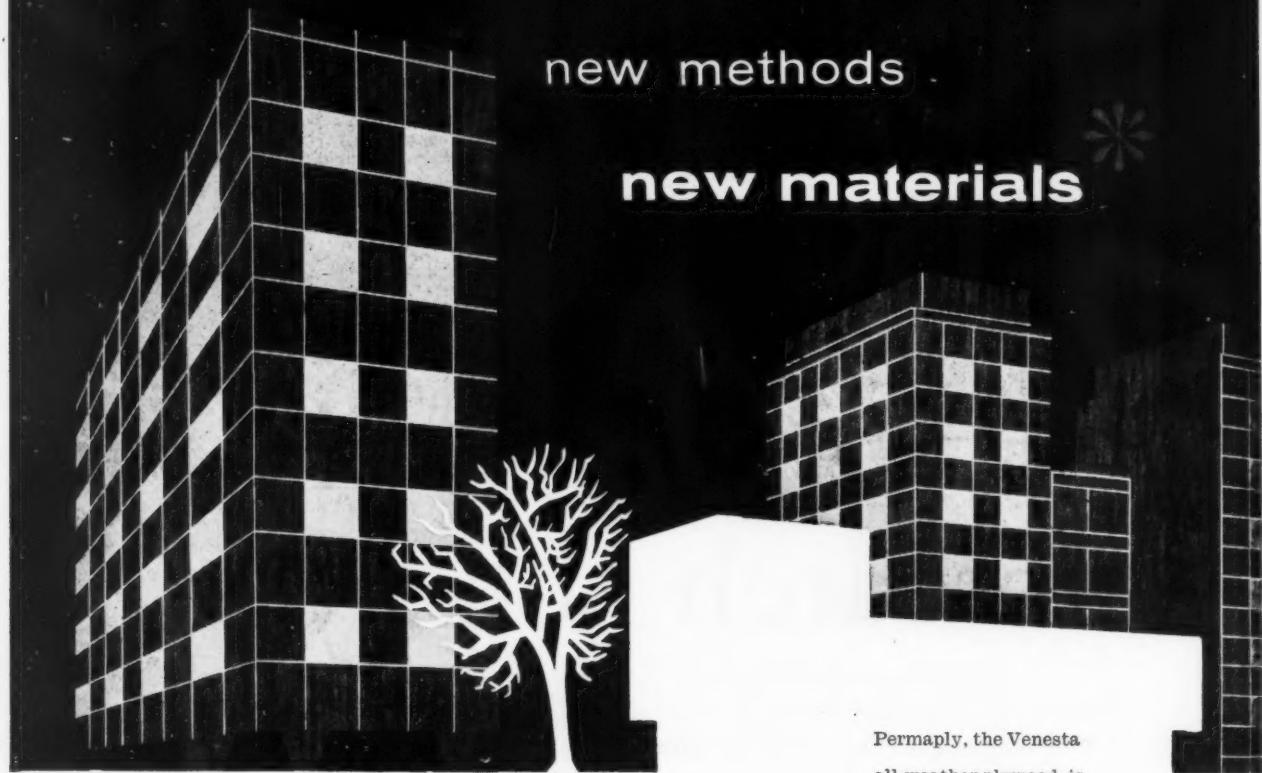
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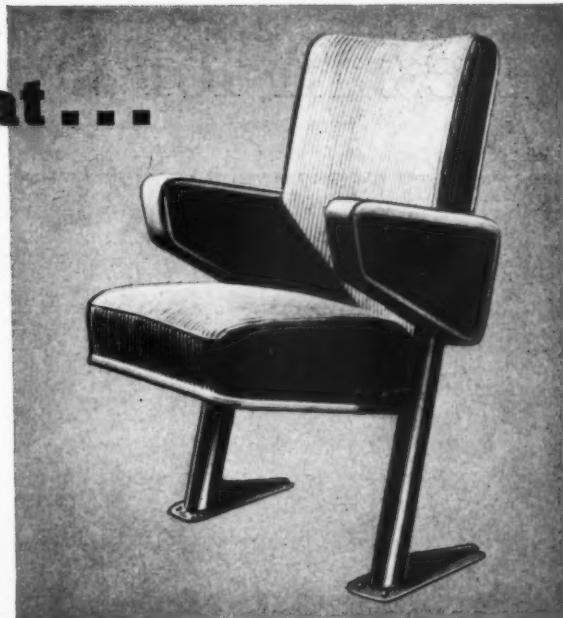
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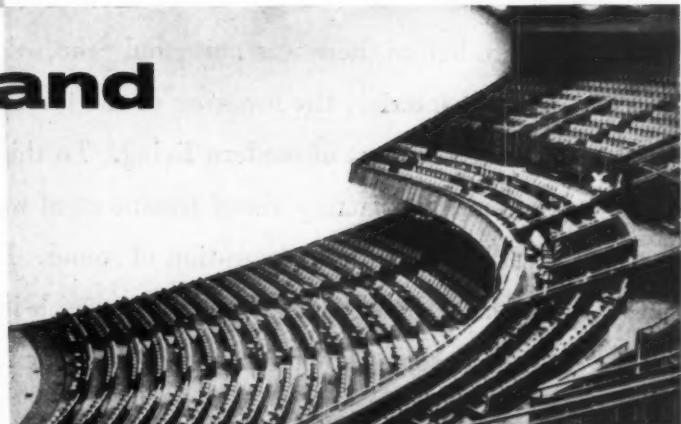


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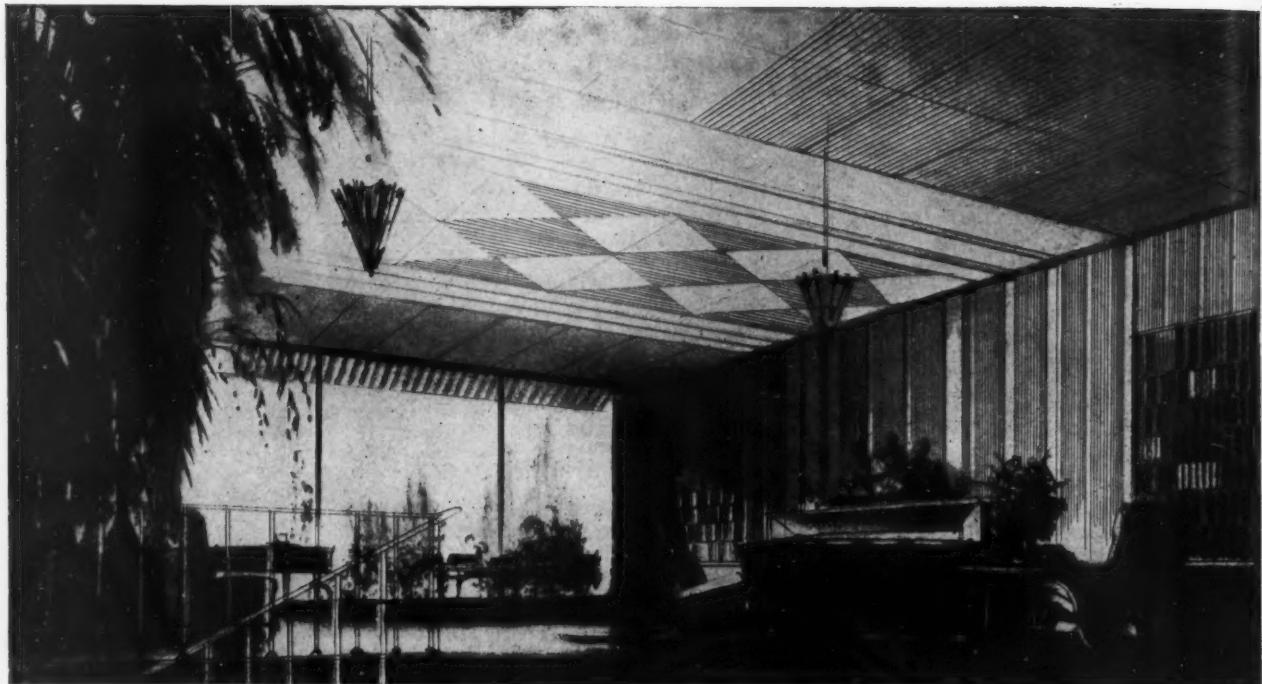
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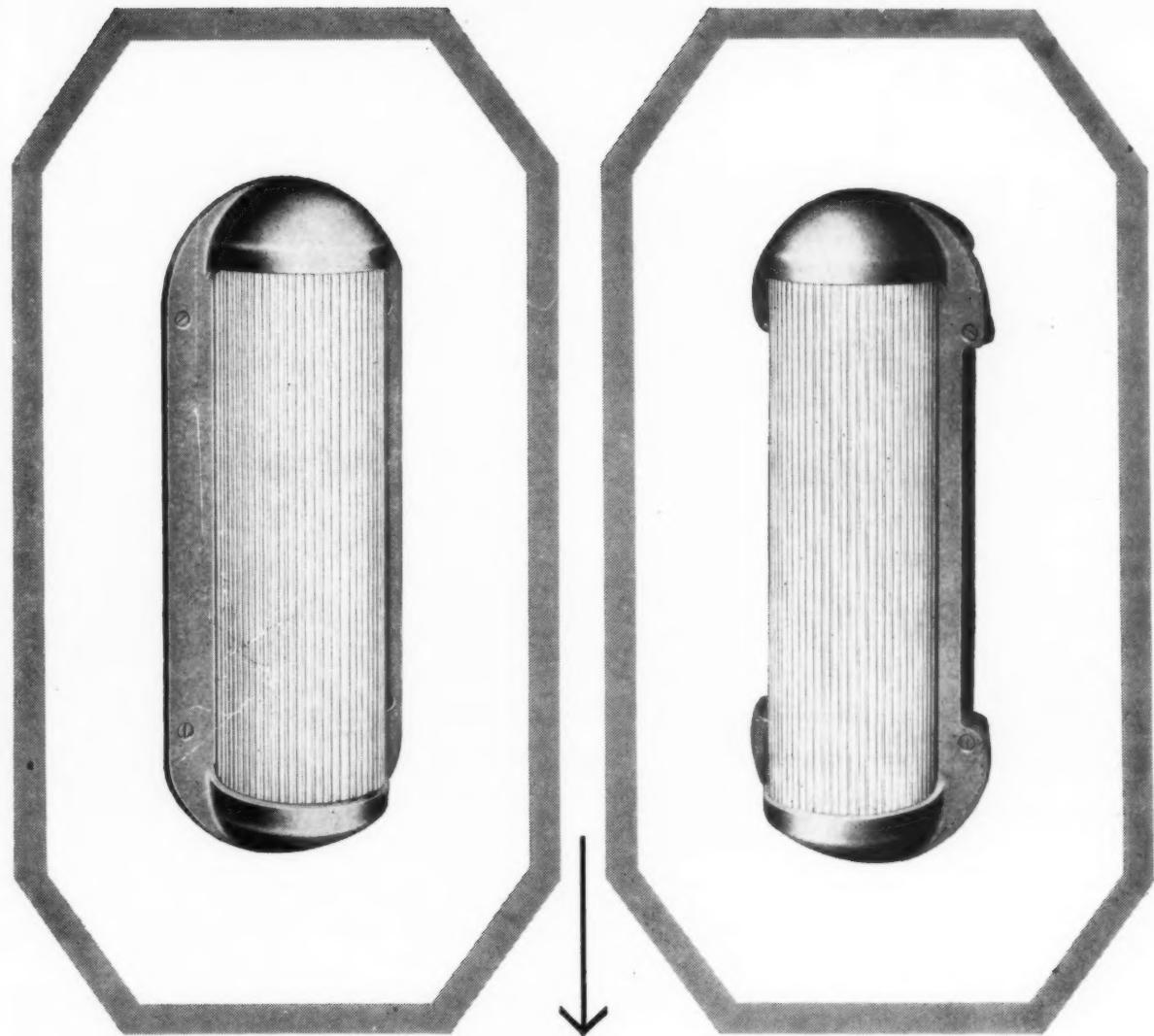
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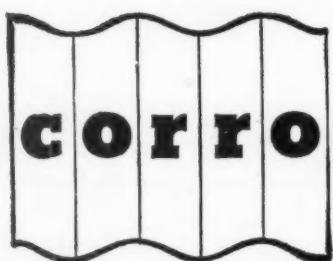


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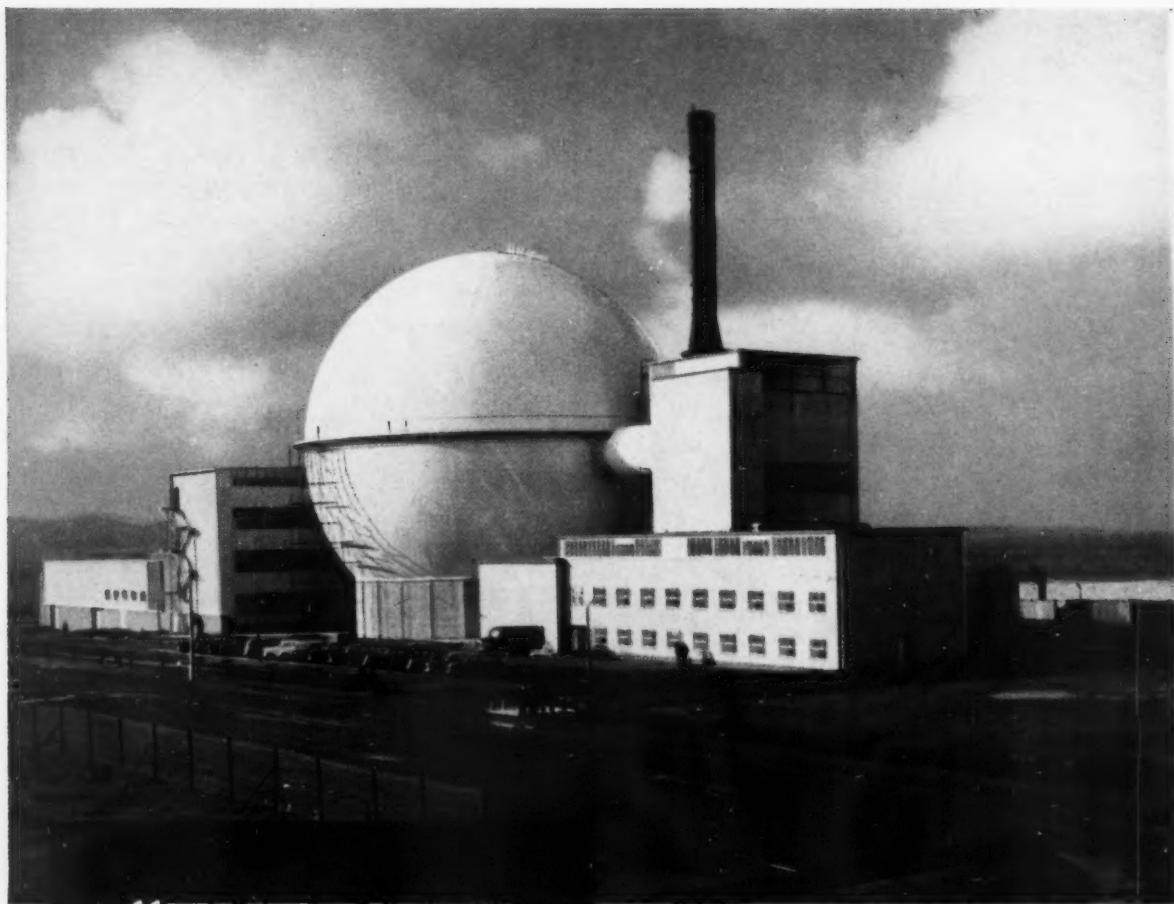


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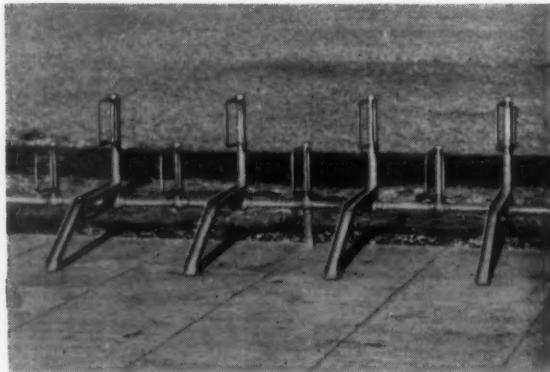
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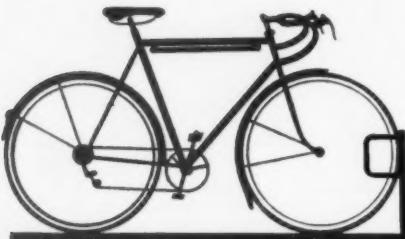
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Young children have a relatively pigment-free lens of the eye, but as the years go by the lens develops a pigment like that in the skin. It is yellowish or brownish and as the years pass, although the whole of the lens is pigmented, the increased degree of pigmentation tends to concentrate at the periphery of the lens. This degree of pigmentation prevents some of the colour energy, particularly in the blue end of the spectrum, from reaching the retina of the eye.

This change in colour reception (and it is similar in both sexes) is progressive with age and very few people are aware of the change of attitude towards colour reception on account of the slow change, but the effect upon the tolerance of colour is a factor of major significance. For the great majority of people the age of 25 years marks the maximum appreciation and differentiation over the whole spectral range from violet to deep red. Even by 30 years the capacity to differentiate between the deep blues is beginning to become apparent, and by 55 years the effort to differentiate in the blue and green end of the spectrum is considerable.

The increased pigmentation of the periphery of the eye with age still further distorts the colour vision away from the line of sight.

Both of these effects combined, mean that given free choice older people tend to select colour schemes for the interior or exterior of buildings which are predominantly taken from the yellow, orange and red end of the spectrum and often light colours containing these hues. Blues and greens are eschewed except for contrast and small areas.

It is therefore advisable to know not only the function of a building, but also the age group of the occupants, before deciding on a series of colour schemes.

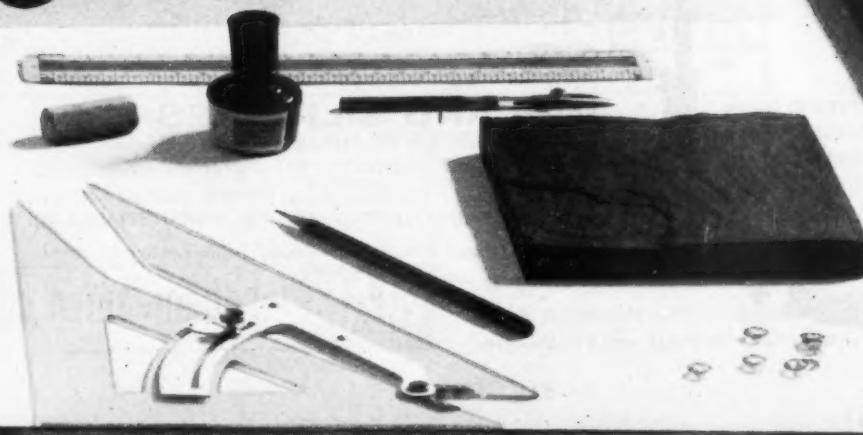
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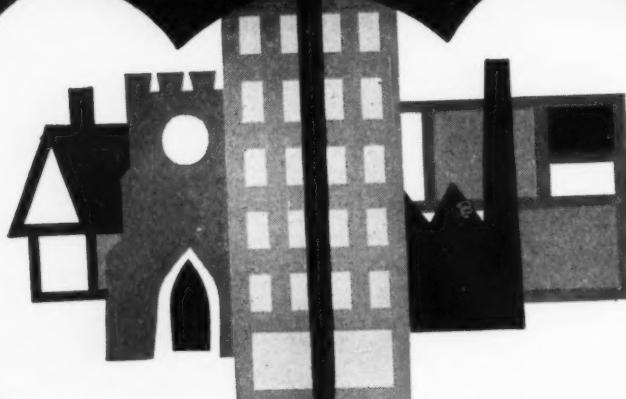
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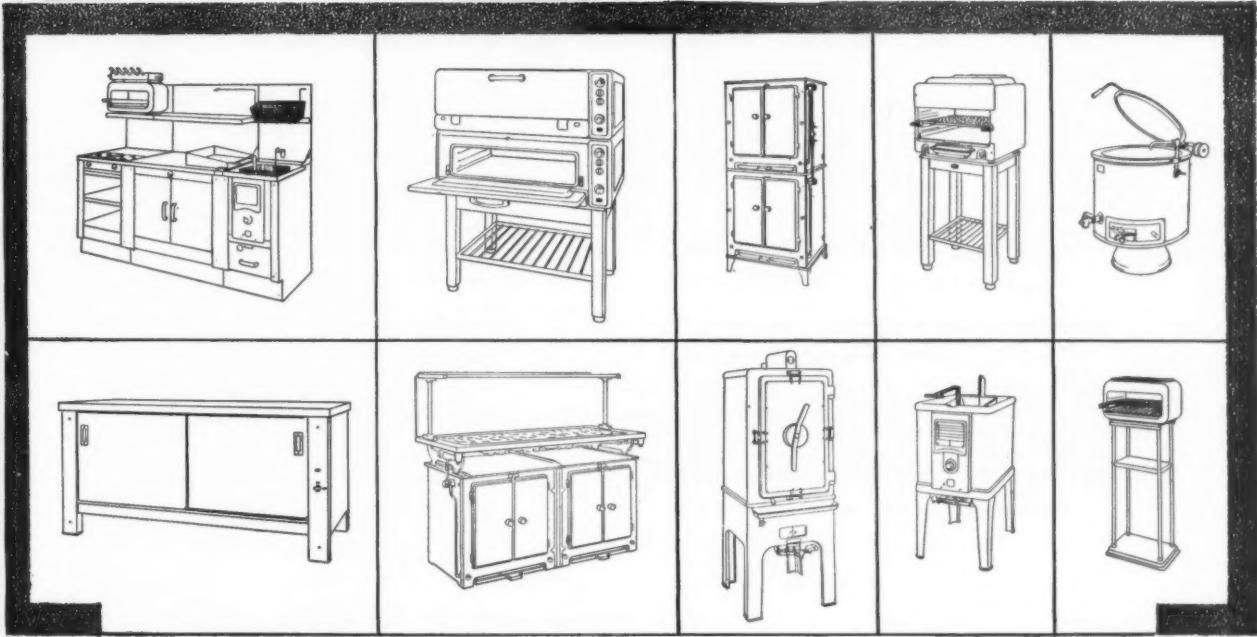
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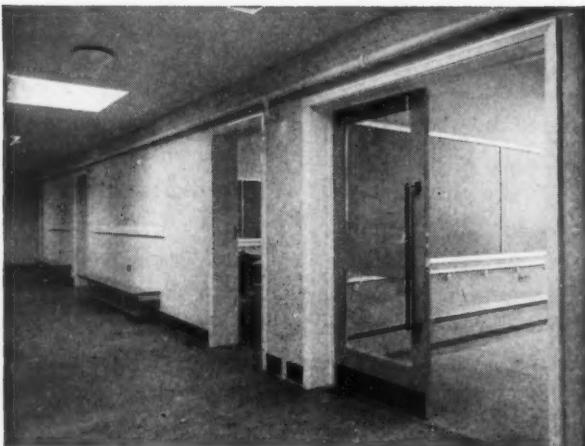
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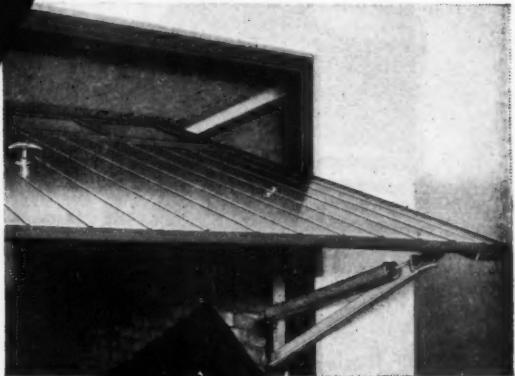
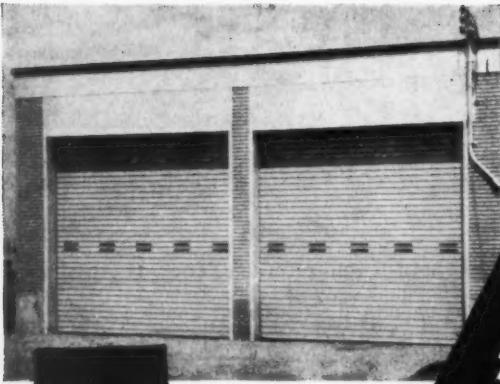
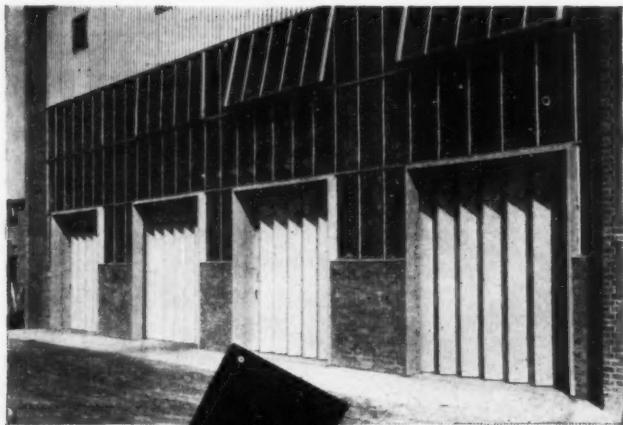


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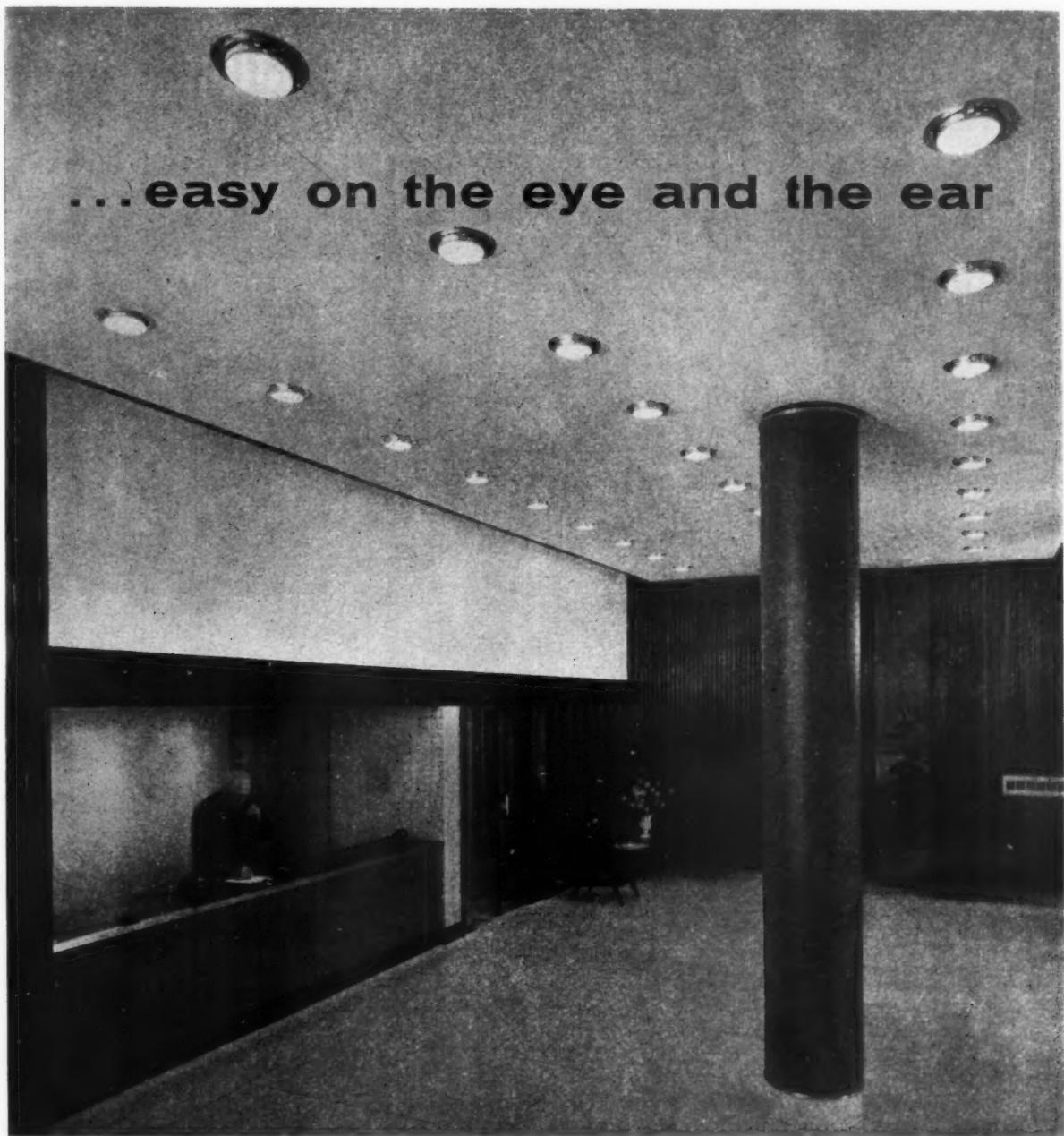
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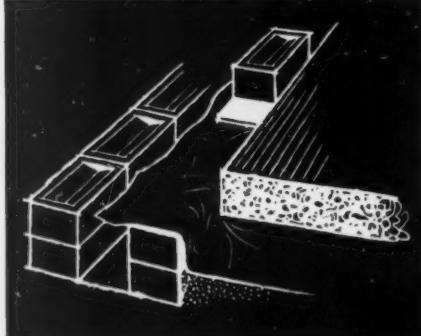
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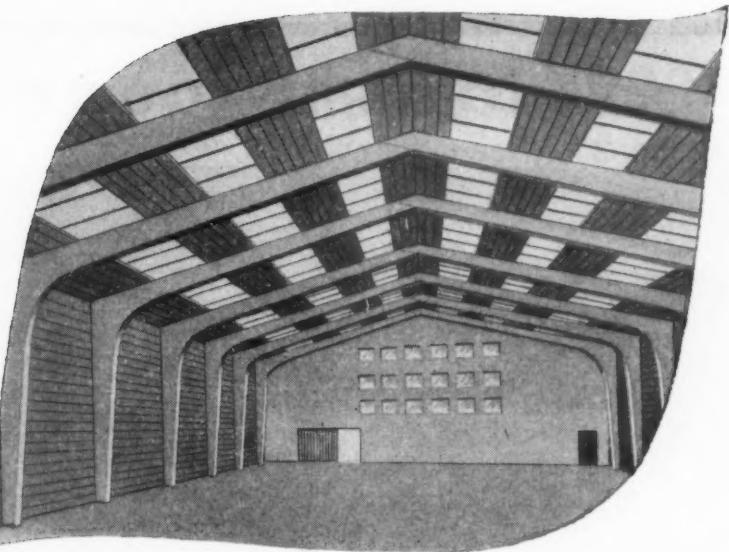
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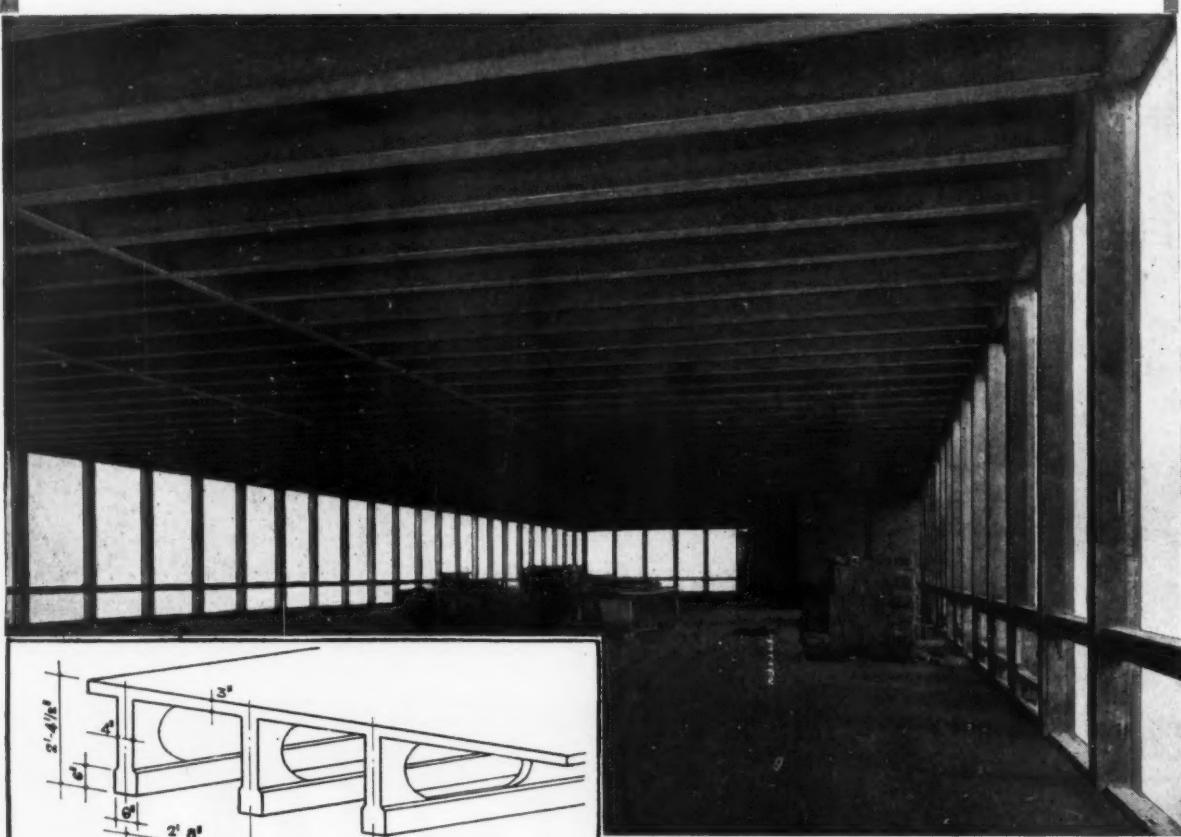
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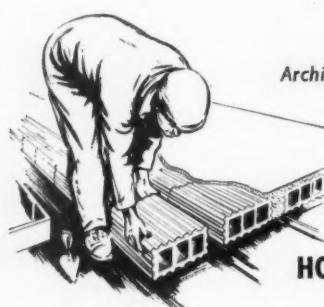
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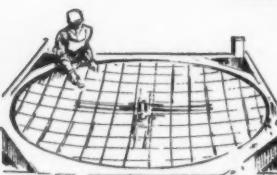
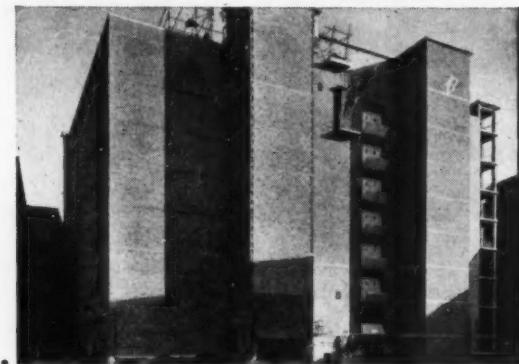
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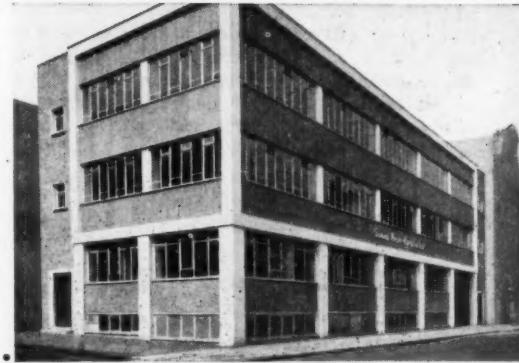
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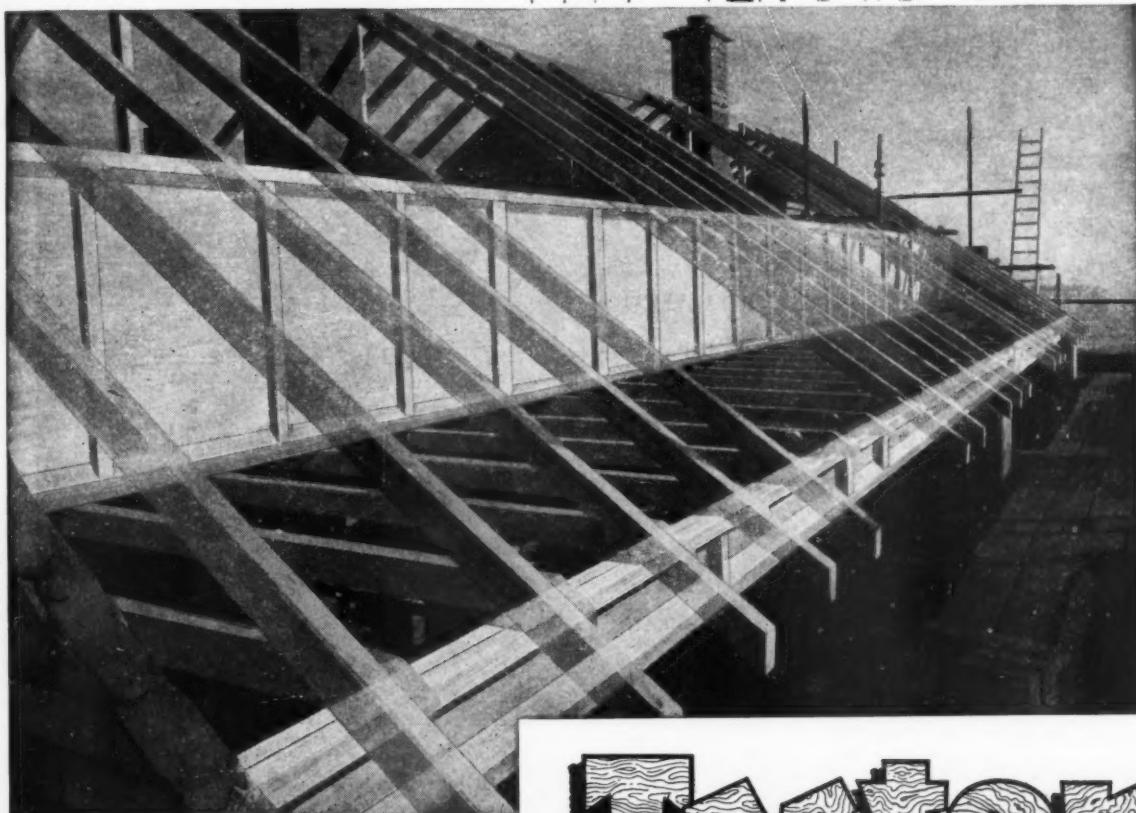
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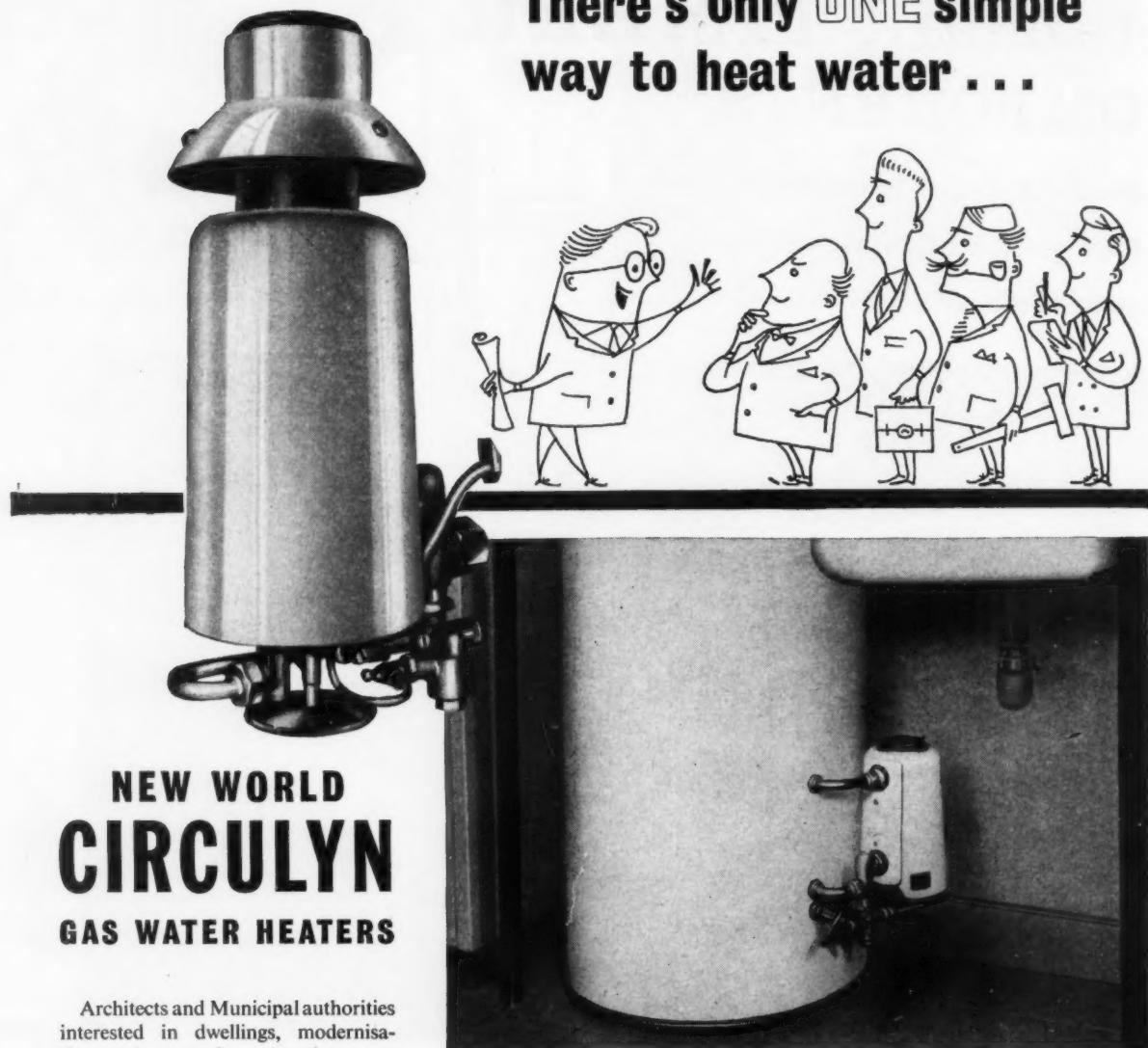
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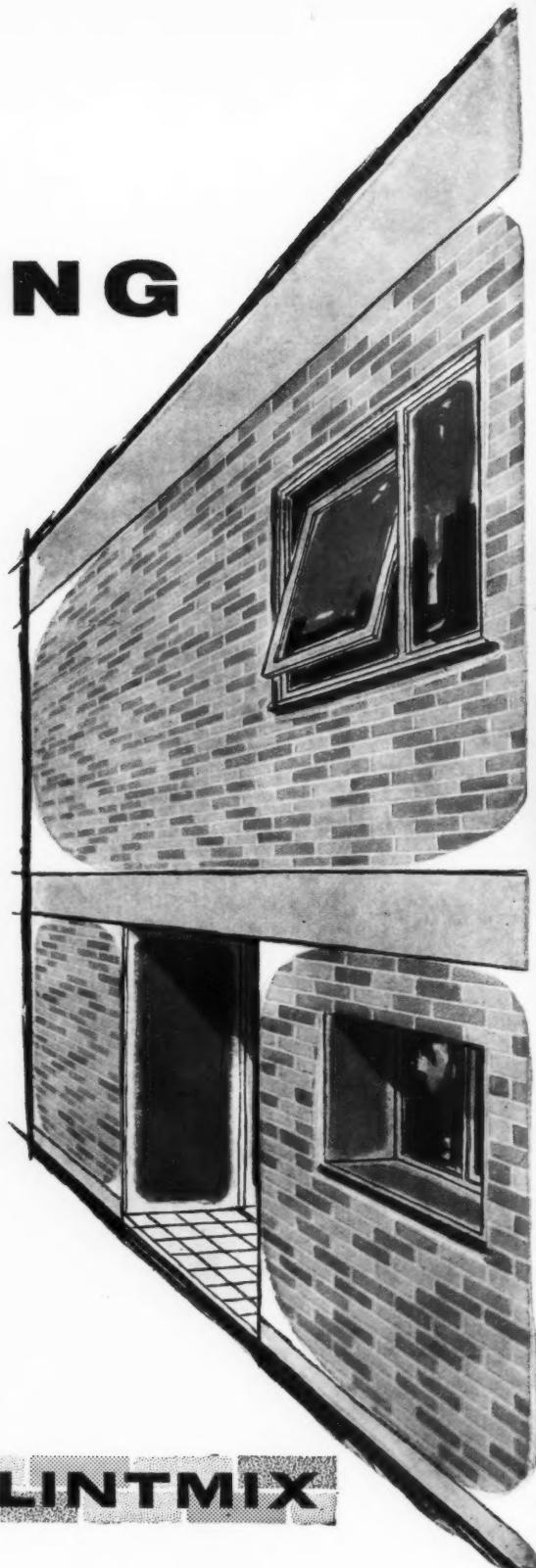
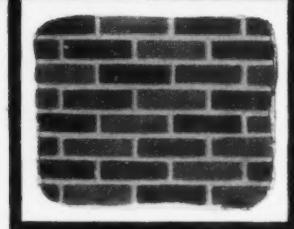
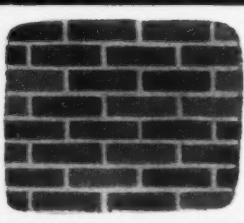
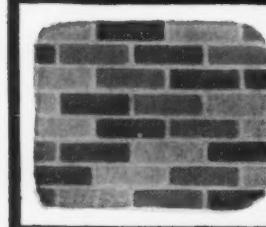
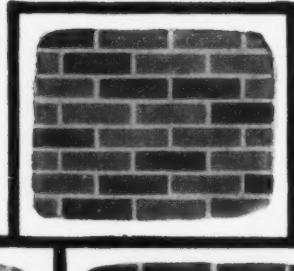
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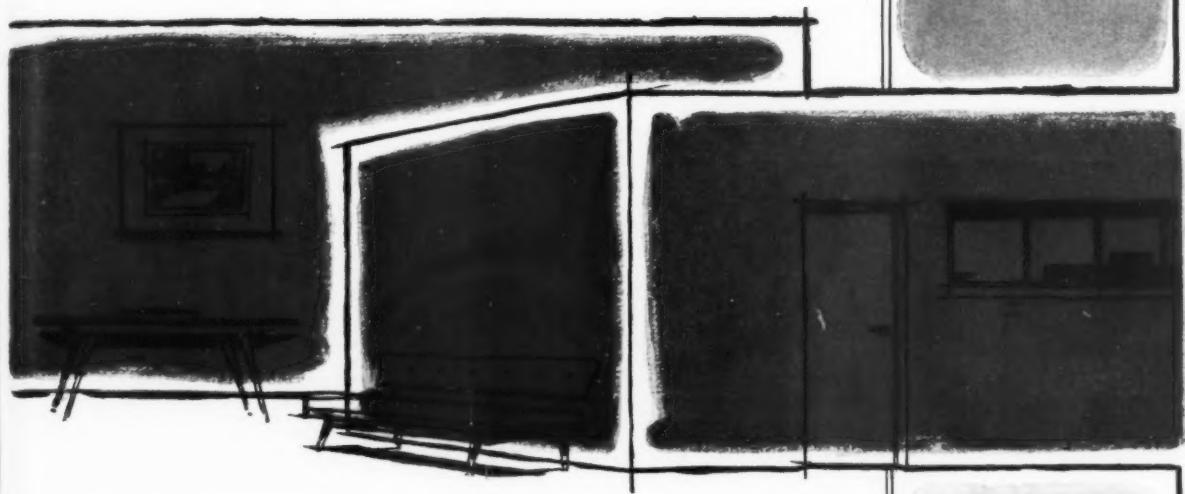
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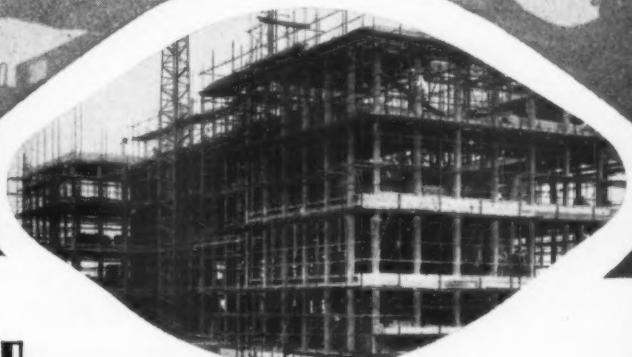
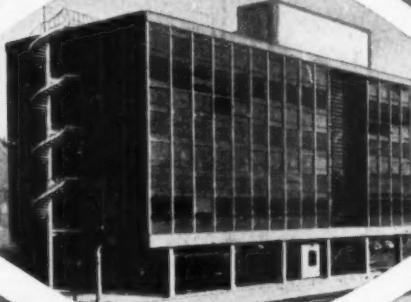
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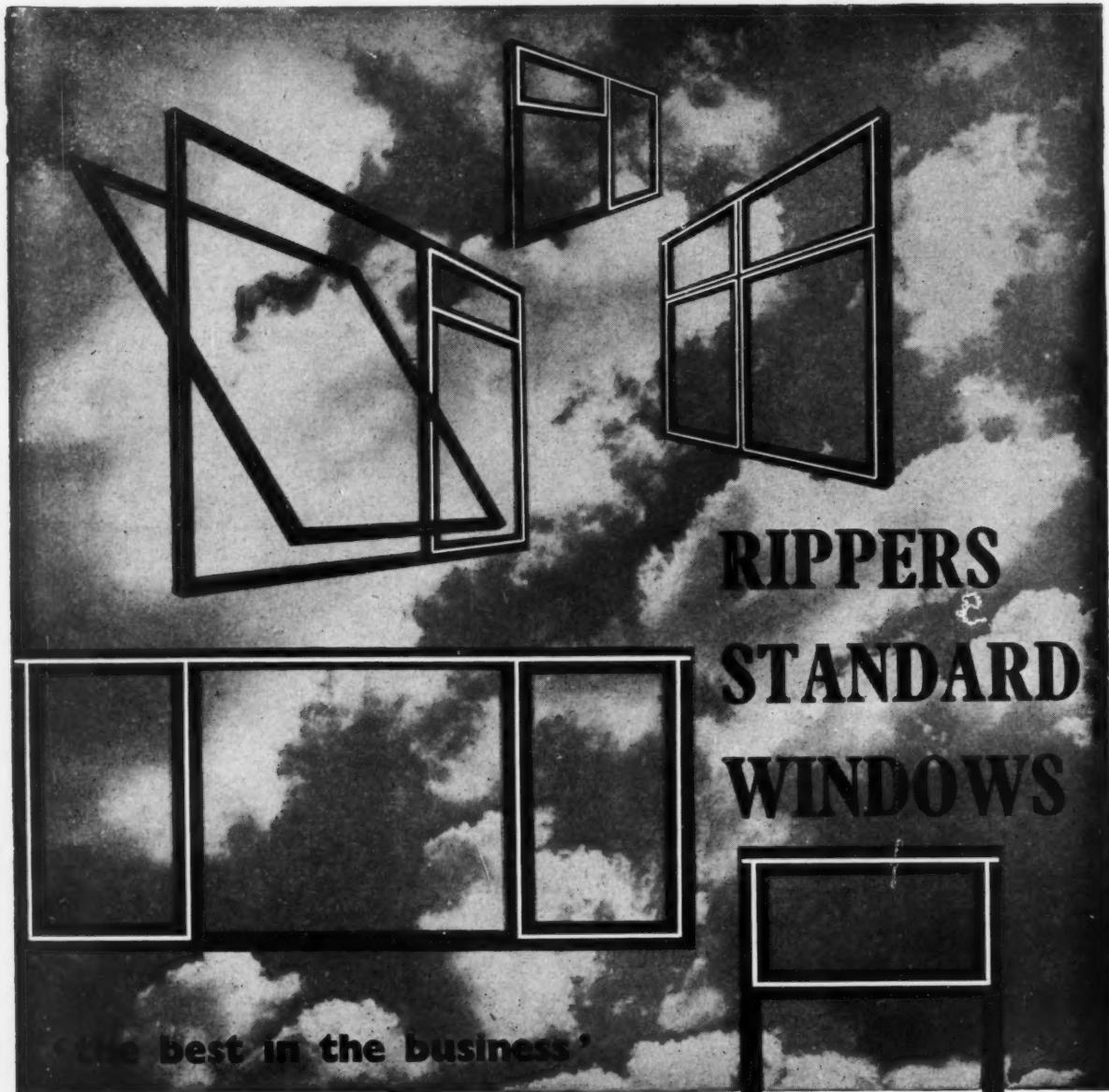
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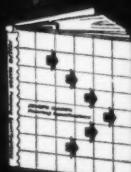
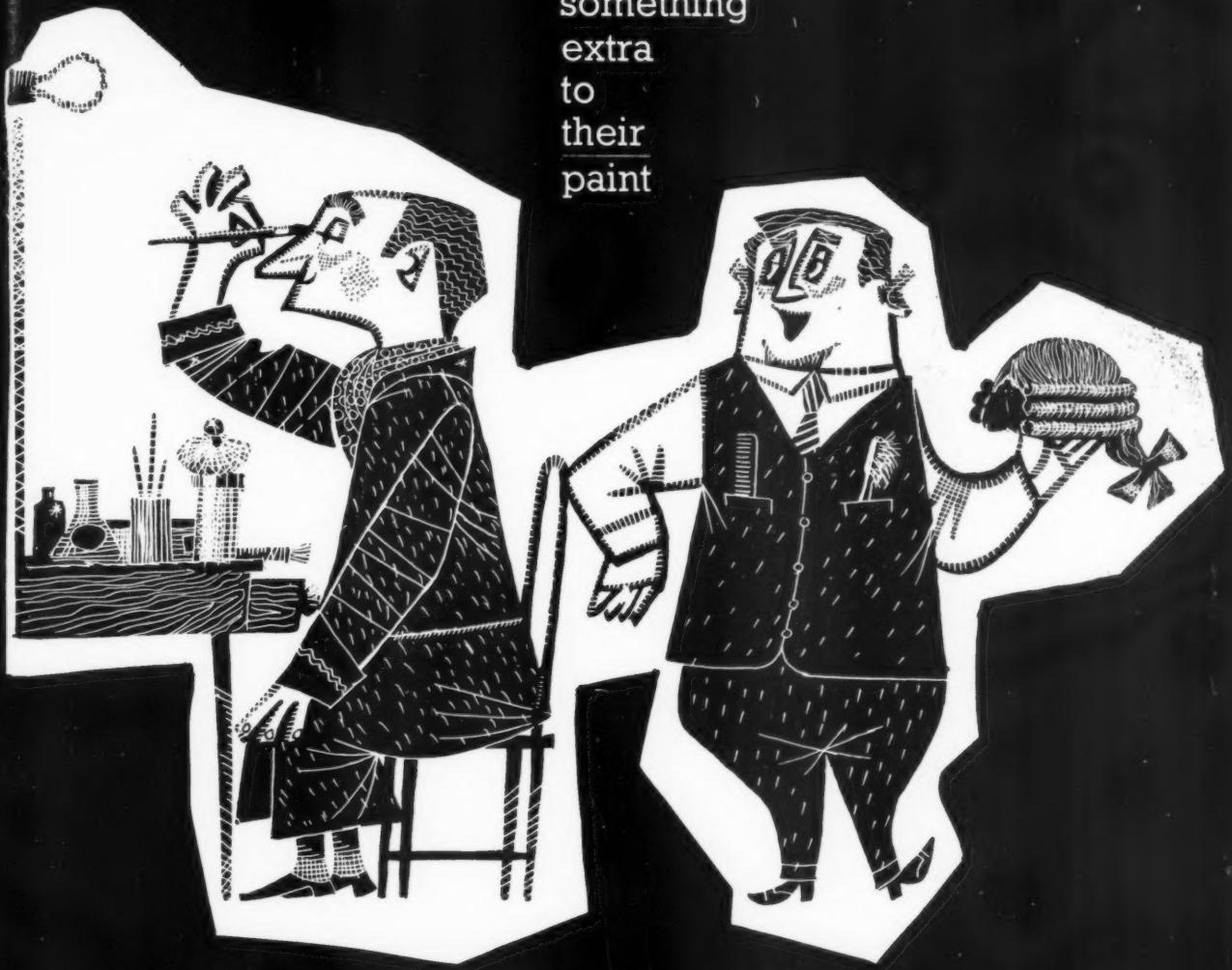


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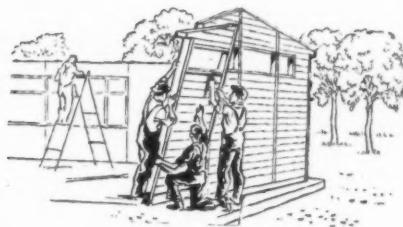
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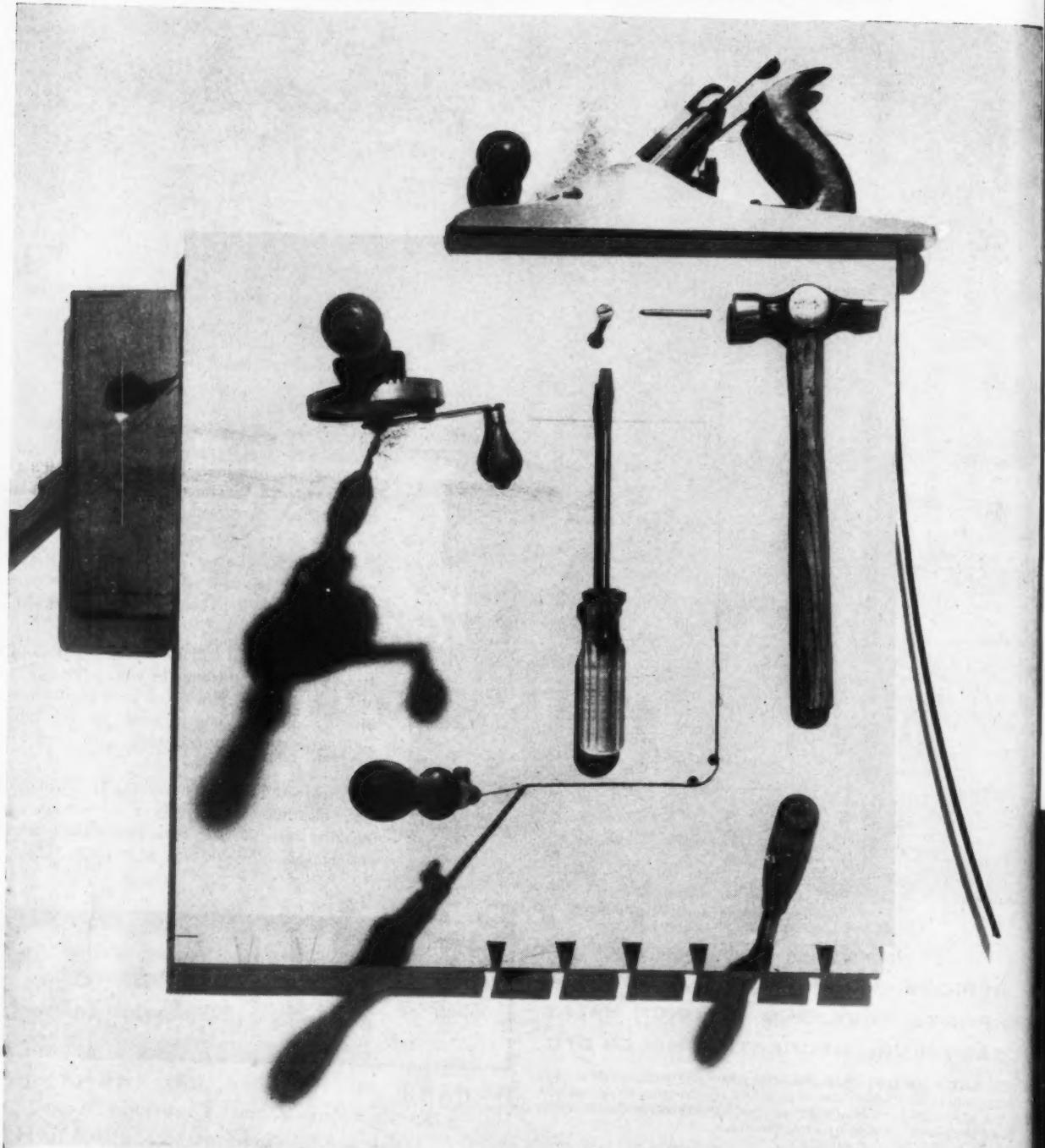


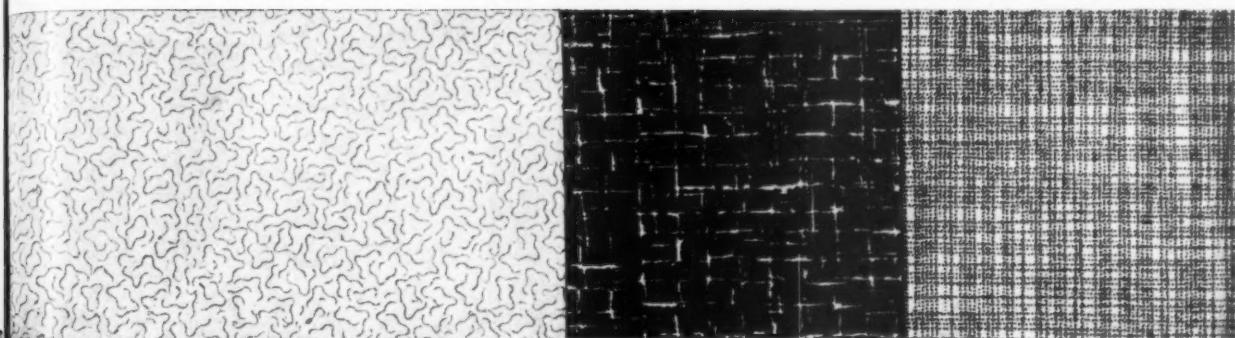
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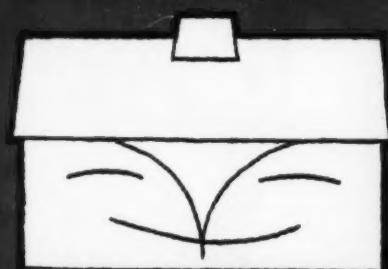
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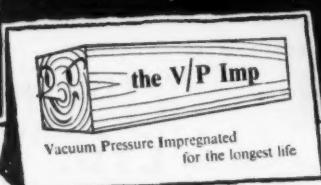
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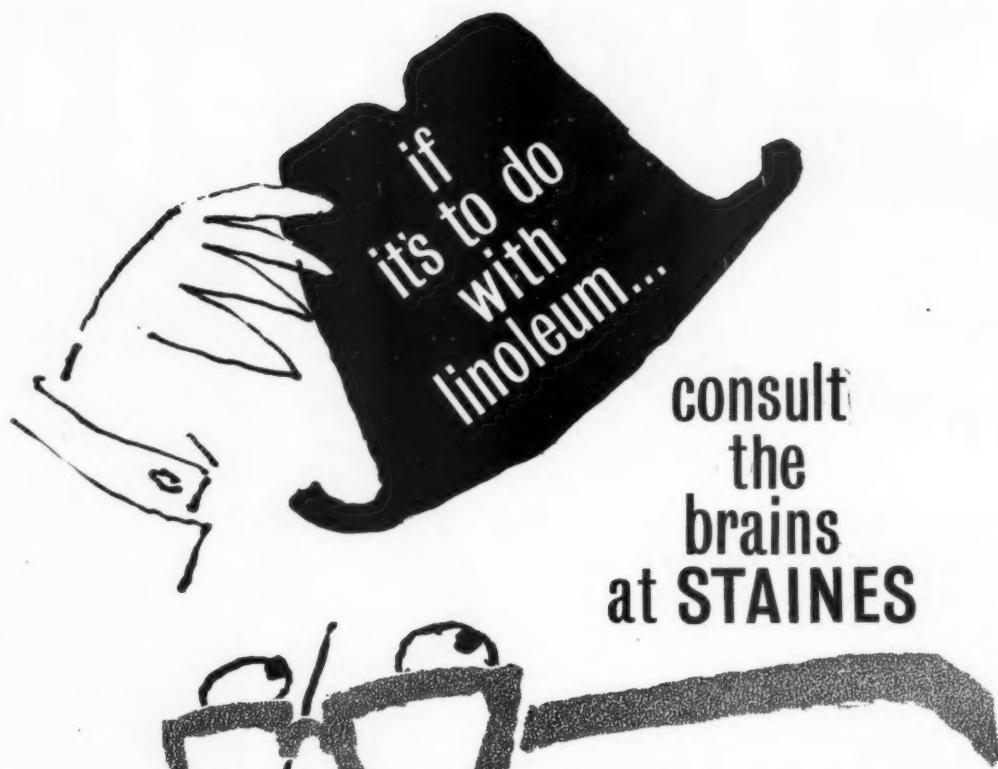
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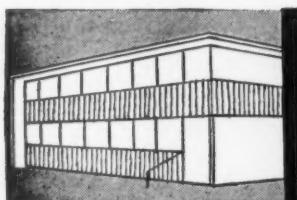
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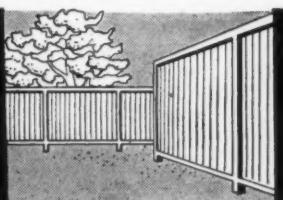
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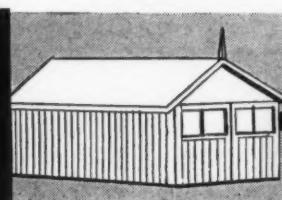
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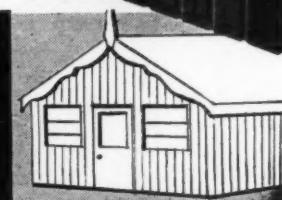
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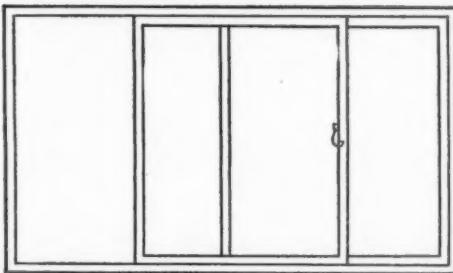
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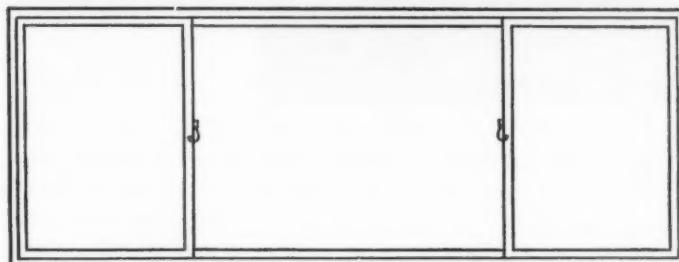
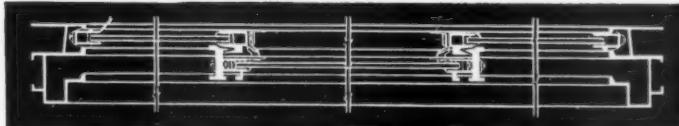
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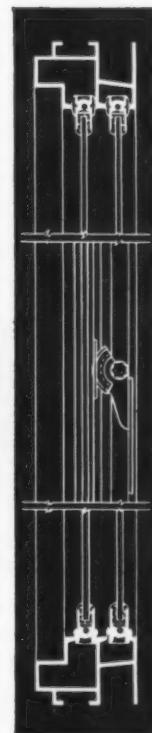
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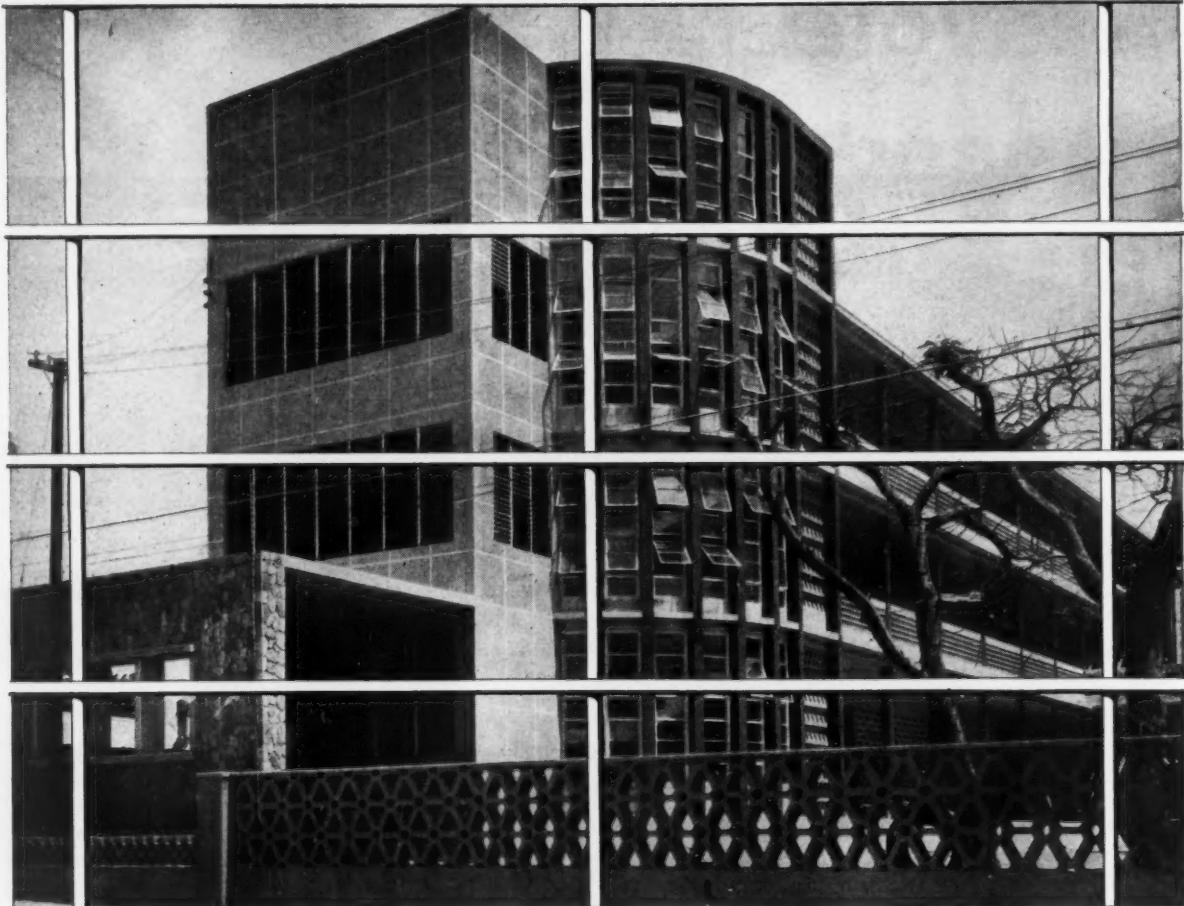
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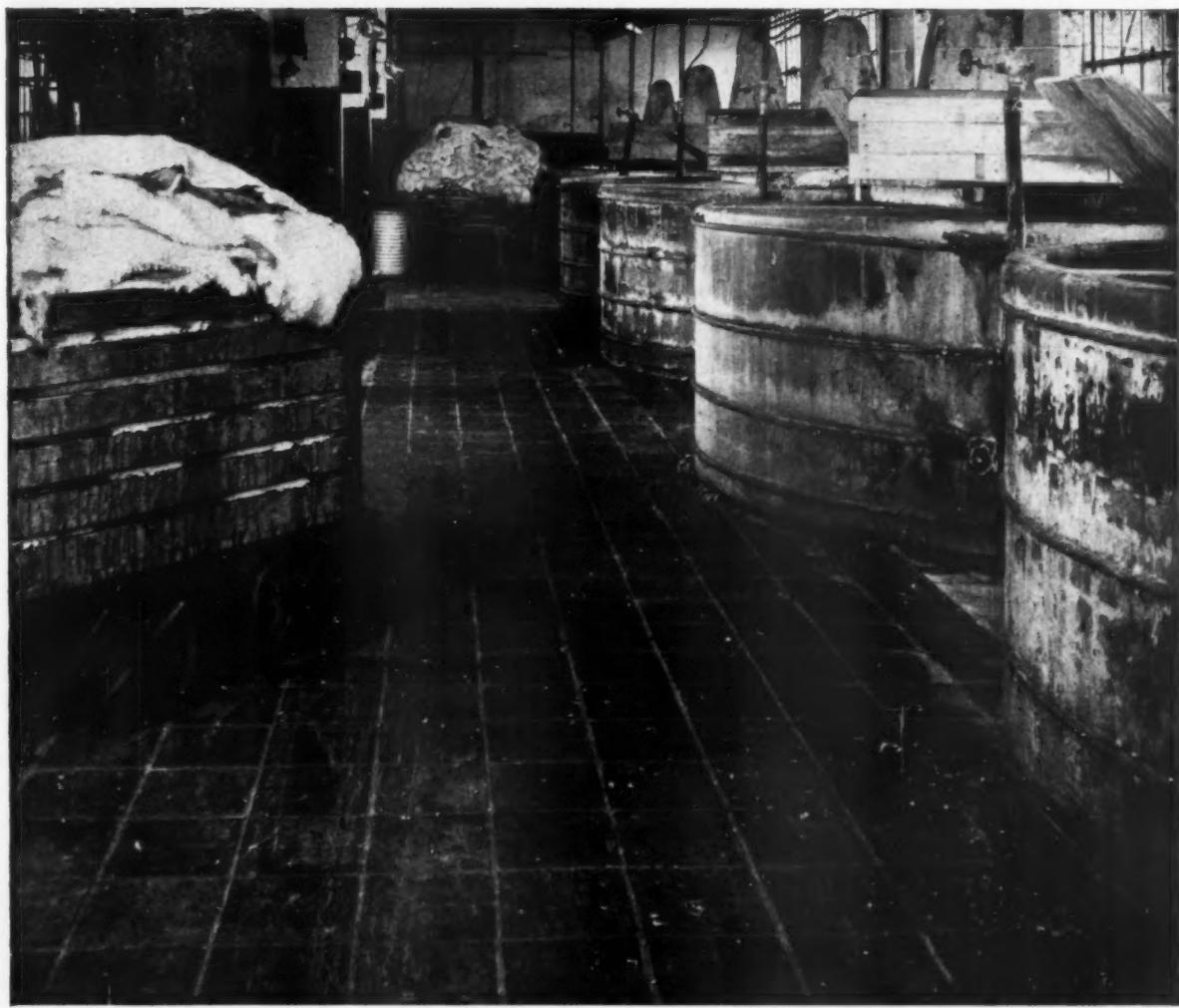
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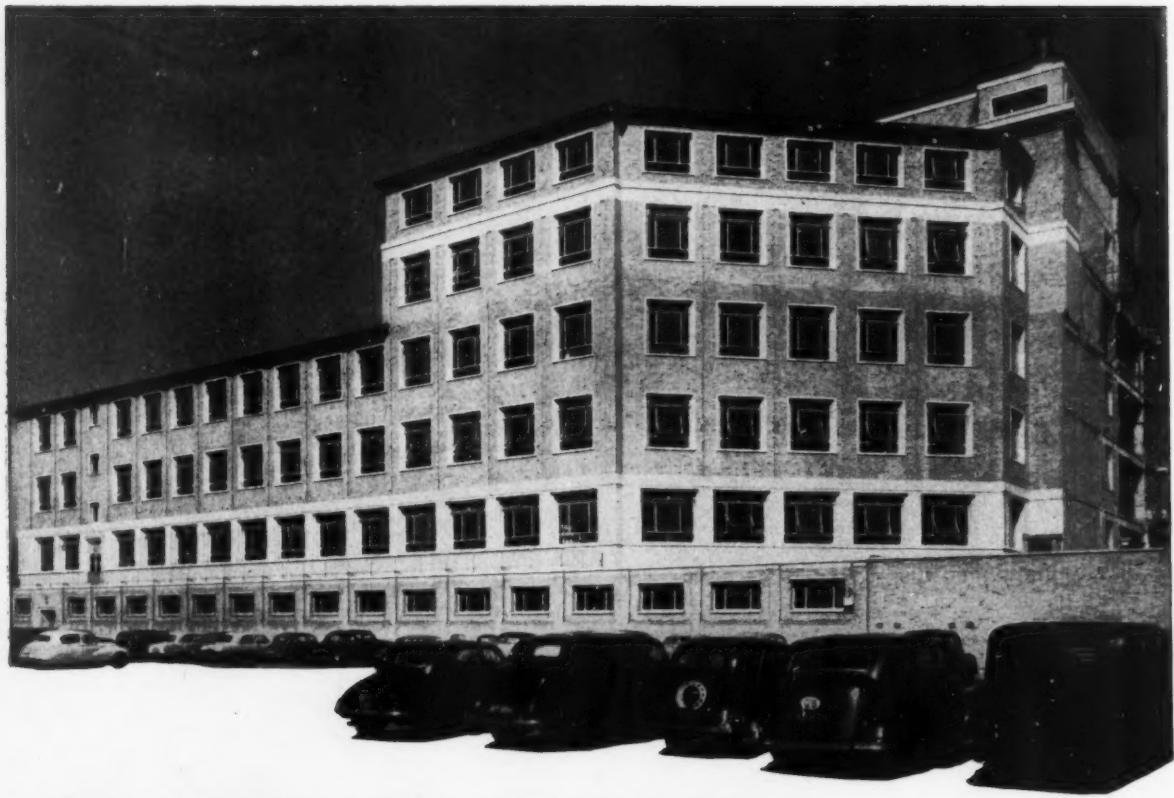
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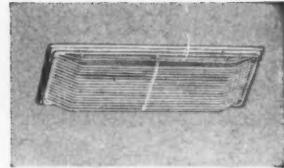




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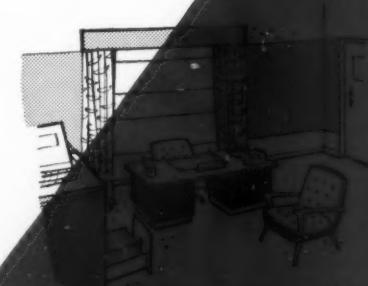
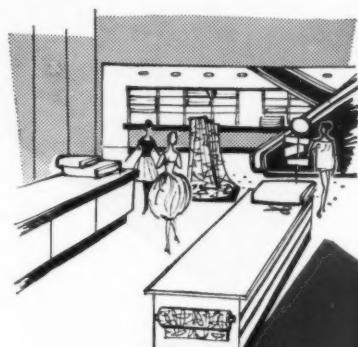
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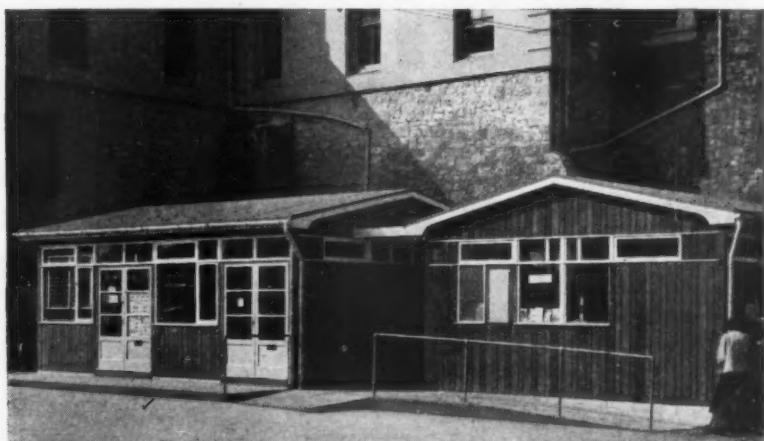
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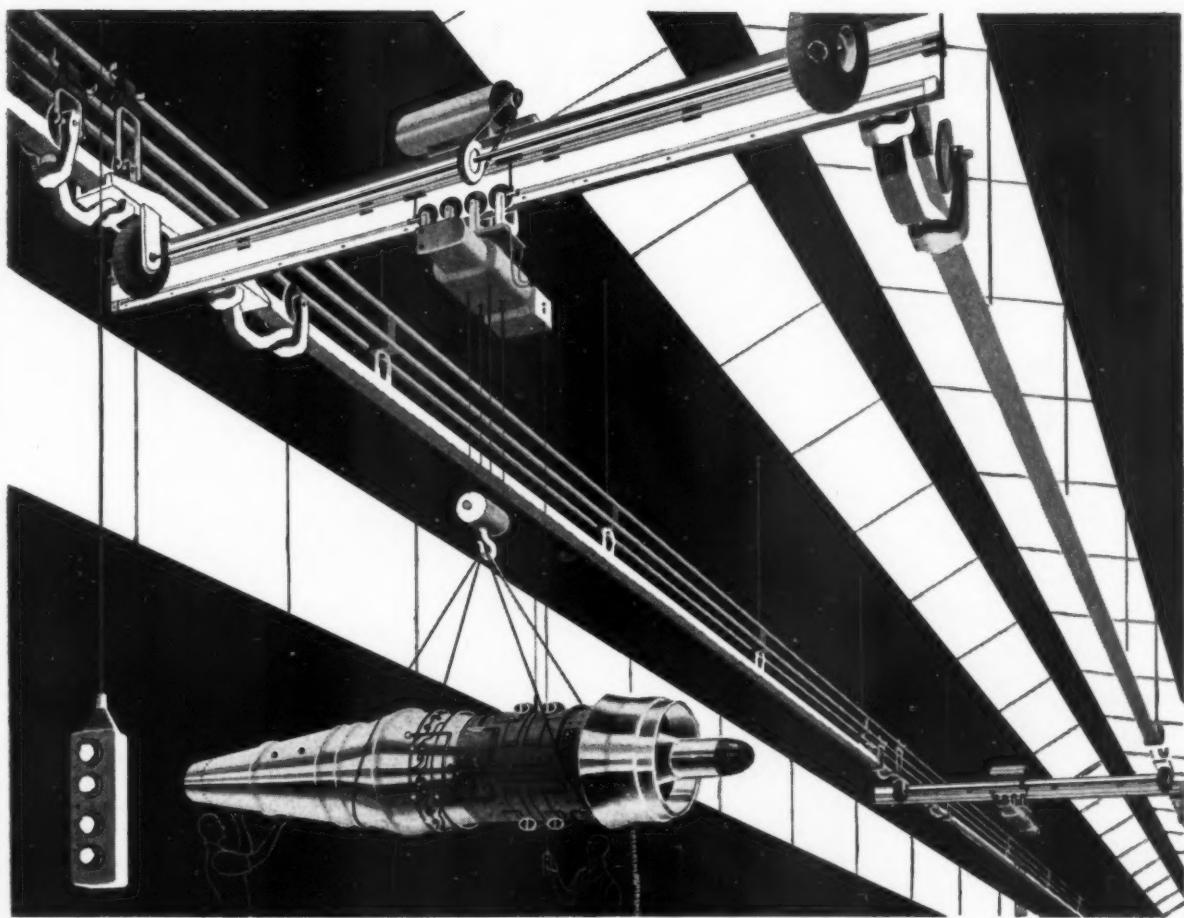
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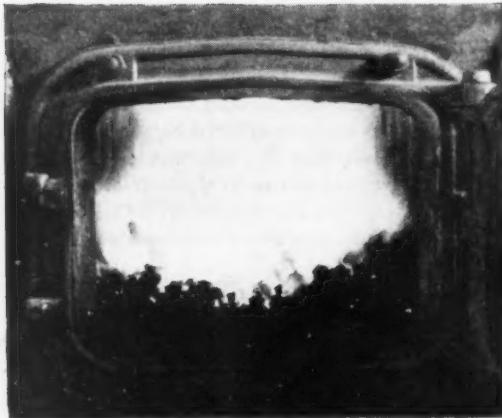
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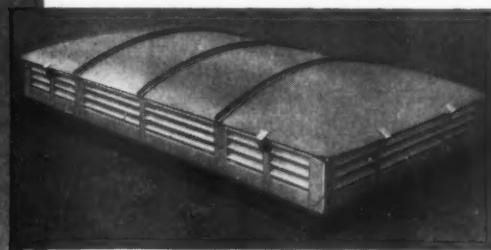
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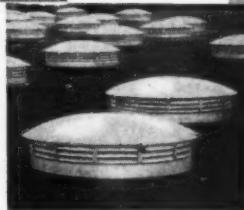
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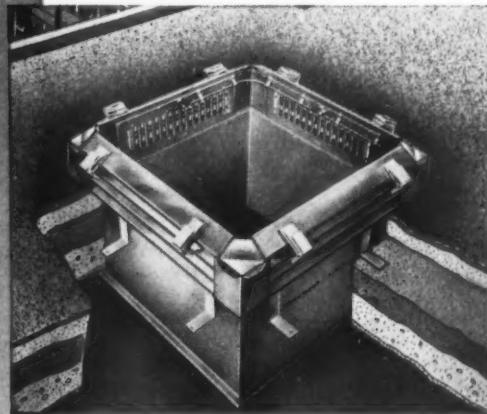


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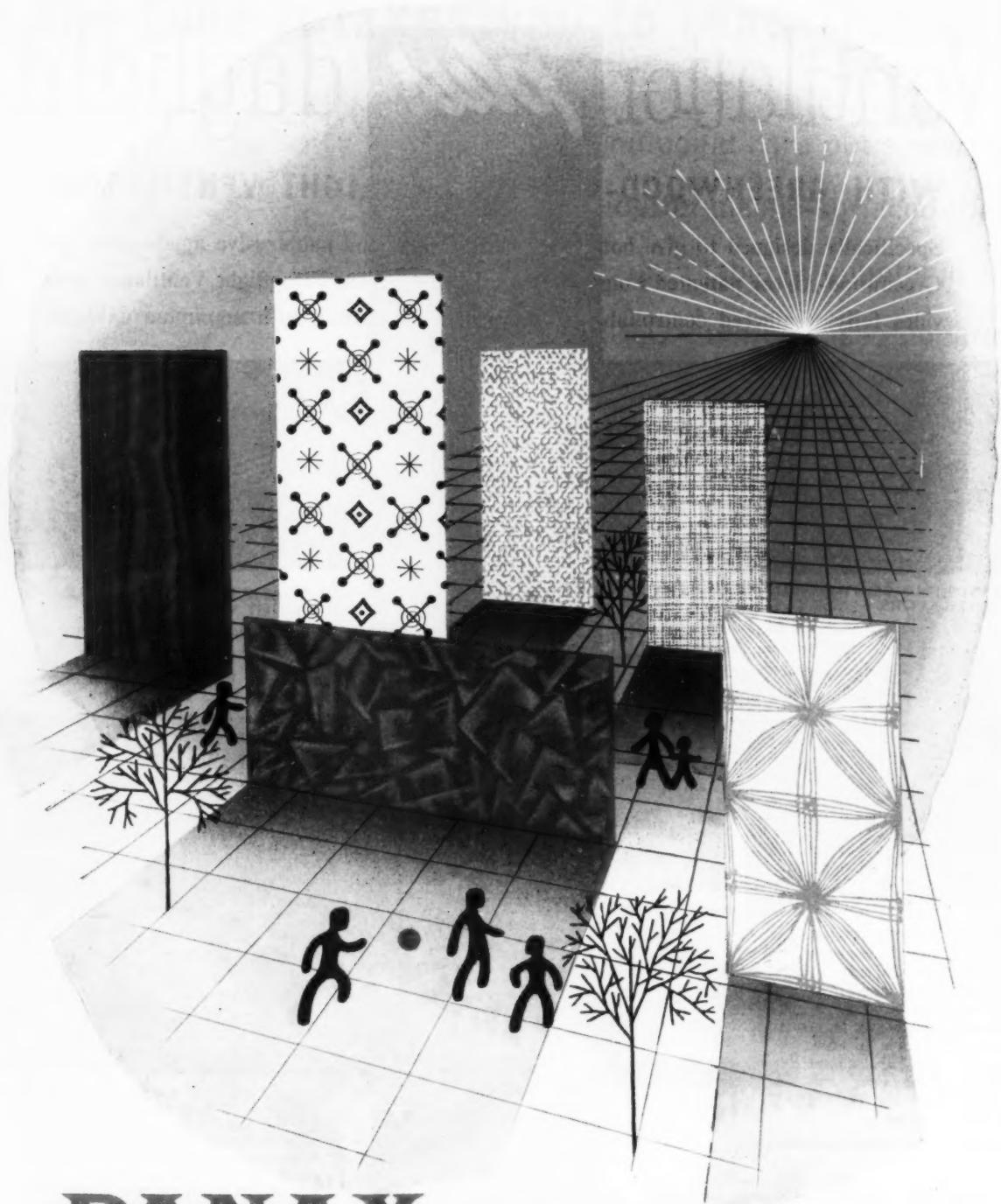
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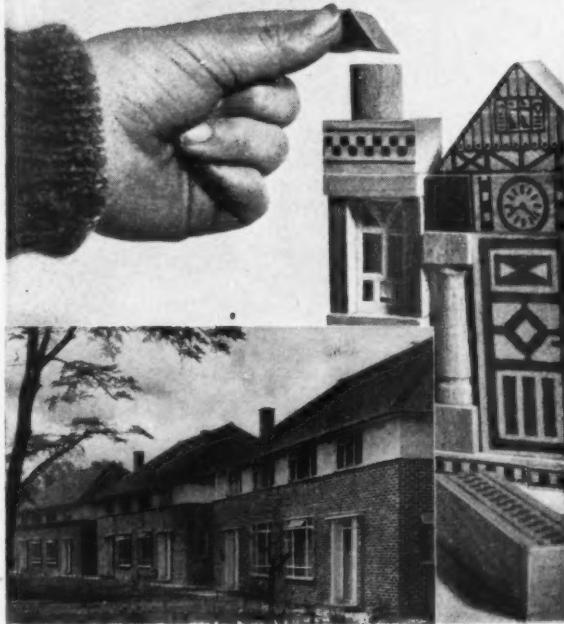
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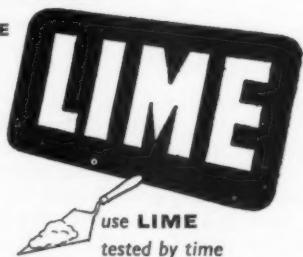
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The Architects' Journal

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NOT QUITE ARCHITECTURE

Life Among the Fixers

It was not until I had hit Sean Mularkey on the head with a 1½-in. steel bar for the third time that he showed a certain animosity towards me. This is a tribute to good nature displayed under the most appalling conditions. Sean had the bad luck to be my mate on a big office block site in London where I was filling in time between studies. It is a twelve-storey reinforced concrete job. Sean and I were labourers to the steel fixers. We spent most of our time cutting steel bars, and carrying them about the site, or up ladders, in a way which seemed calculated to ensure that the maximum man-hours were wasted. The steel arrived by lorry in 40 ft. lengths. The crane dumped it in heaps in between the columns which were ready to support the next floor. Loads of steel tend to twist in mid-air, so that they are dropped in such a way that it is impossible to move one piece without levering half the load out of the way. Whole mornings were spent with crowbars and much bad language playing this variation of pik-a-stiks. Even this was bearable, until the shuttering was put up for the slabs, and the steel was fenced off from the cutter by a forest of joists. It doesn't take a time and motion



Sites For Norwich University

Where should a university be: within a city or on the edge of a suburb? Should it be creating, and taking part in, the cultural life of a city, or should it be cloistered, self-contained, and outside the town? As is described in this week's leading article opposite, the University Grants Committee believe that new universities should be sited with their playing fields, as, in ideal conditions, are primary and secondary schools. Norwich is considering the foundation of a university and two possible sites (numbered 4 and 5 on the map opposite) are shown in the aerial view, above. In the foreground, beyond the church, is the Ber Street area of about 30 acres (site 4) running down hill to King Street, which lies parallel with, and close beside, the river. Just off the photograph, to the left, is the Castle,

and the centre of Norwich (see map, opposite). Over the river, in the middle distance, left, are gas-holders, and eleven o'clock from them can just be seen the parade ground and buildings of Britannia Barracks, site 5. In the far distance is the countryside, and it is at an equivalent distance, or even greater (though in the opposite direction) that the two 200 acre sites lie which meet the UGC's requirements. Although the first costs of land, and of building, would be cheaper on a virgin peripheral site, the low quality, partly derelict area in the centre will have to be developed eventually, and the final costs, bearing in mind the inconvenience of travelling daily to, and servicing, a suburban university, may not prove very much greater to the community at large.

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expert to see a loss of efficiency, given that the bars are 40 ft. long, and the joists about 5 ft. apart.

Imagine a steel bar, 40 ft. long, and 1½ in. in diameter, bearing directly on your collar bone. You lurch two steps forward. The bar bounces up and down in the middle, with a sawing effect on your collar bone. You are on the wrong side of a joist, so you take a step backwards and trip over a piece of wood left behind by the chippies:—"You bloind oyed —!"

*

When we emerged from the forest, sweating, rusty and short tempered, we were in no mood for accuracy. The precise results of the architect's labours reached us in the form of grubby little pieces of paper which we stuck behind the shuttering. If we had to cut, say, 120 11-ft. sixes, we would nail a piece of wood to the bench at about 11 ft. 6 in. The cutter was electrically powered, with a huge flywheel. The inexorable opening and closing demanded a quick decision—you had to ram in the bar and take refuge behind a column lest it kicked you on the knee-cap. The piece of wood naturally crept along the bench as successive bars were rammed against it, so that they became gradually longer. For smaller numbers we would make a chalk mark on the bench. This was often difficult to distinguish from the various other chalk marks, resulting in inaccuracies of up to 6 in. either way. Most of the cut lengths had to be "shunted" back through the joists to Taffy, the bender, who had a grudge against everybody in general and us in particular.

*

Sometimes we cut too few, too many, or, very rarely, so inaccurately that somebody important complained. I once spent a whole day humping steel down the ladders which I had carried it up the week before.

*

Frequently "the Guv'nor" would decide that "concreting will be done tomorrow morning." This meant bonus for getting the job done quickly. On these occasions I expected somebody to be killed any minute, and as I have already mentioned, people did get hit on the head now and again. Bars swung about lethally. People literally ran up ladders, and links were thrown up to the next floor. Since they would be buried in concrete very soon, the foreman took chances, and put bob-bars in straight.

*

The emergence of a clean, precise, concrete frame from this mud and chaos is a truly wonderful thing. But would it not be better to make a practice of cutting and bending the steel elsewhere—in a proper plant instead of using the present medieval method? It would be a pity to destroy the lovable, cosmopolitan community of the building site, but presumably there will always be muck-shifting to be done, where a man like me can do rather less harm to the building itself.

ALASDAIR MACEWEN

The Editors

UNIVERSITIES: GENUINE URBAN OR FAKE SUBURBAN?



1. Already owned by Corporation.
2. Golf Club's lease expires in a few years.
3. Offered as a gift.
4. Redevelopment area: clearance orders out.
5. Redundant barracks.

that merely destroy suburban areas that ought to have been kept for Green Belts.

The mechanism by which UGC does this is—as always with unwitting subtopianism—the unrealistic application of diagrammatic rules. In the negotiations for the new university in Norwich, for instance, UGC has apparently laid it down as a prime requirement that the proposed University *must* stand in its own playing-fields, with the result that only sites of more than 200 acres in one piece are acceptable. The two sites within the City Corporation's command that answer this requirement (1 and 2 on the map above) are also the last two substantial areas of green landscape (both are golf-courses at present) within the city boundary. If either is to be developed for public use, it should be as parks.

But if this insistence on playing-fields on the doorstep can be waived then three other sites become viable, two of them in closer suburban locations (3 and 5), and one a central area (4) scheduled for redevelopment in the immediate future—indeed, clearance orders have been issued already. The claims of this last site are overwhelming from the town-planning point of view. Lying between Ber Street and King Street, the top and bottom of a steep ridge, it is not likely to be developed by commercial interests because of the nature of the terrain which would, however, offer sites of great character for University development. It is located in such a way that it offers most of the advantages of a compact medieval town abutting the Castle at one end, the city wall at the other, with open country barely a mile away. Lastly, it would bring a much needed third force into the centre of the city, which is in grave danger of falling entirely into the hands of megalomaniac traffic engineering, and a single financial monopoly with a poor record in architectural taste.

At whatever point on the city's perimeter the concomitant playing fields were placed, they would still be within half an hour of this site by bus or bicycle, which—surely—is not too

THE University Grants Committee is not one of the bodies that is normally accounted an agent of urban sprawl, but the attitude they have adopted in the negotiations for new universities suggests that they have a limited appreciation of present needs in urban renewal, and seem bent on repeating what has been called "The Reading Mistake" of creating pseudo-landscape campuses or rural areas that ought to

far to ask the sporting minority of undergraduates to travel. If the UGC is genuinely an instrument of culture, not merely a graduate-production-line, then it should abandon its insistence on single two-hundred acre sites, and be prepared to back developments such as this, which would be of value to the life of the university, as well as a contribution to sane urban development. Universities by tradition and common sense are part of towns and should not be cut off from them. The University for Sussex has already been sited miles from Brighton and it is presumably too late to change, however much Brighton may need such an injection of new life and building. But other universities are being planned, at York, Coventry, Canterbury, and so on. It is to be hoped that in these instances a greater sense of social responsibility will prevail.

LCC NEW TOWNS A NATIONAL NECESSITY

Architects and planners will greet with great dismay the news that the LCC is contemplating abandoning its project for a new town at Hook, Hampshire. A case can be made for opposing the new town because, while helping to solve the LCC's overspill problem, it still adds to the growth of development in south-east England, and it is perilously close to the towns of Basingstoke and Farnborough. But it is not on these grounds that the LCC seems prepared to abandon the venture. Hampshire County Council is asking the LCC to join them and other local authorities in expanding existing towns such as Basingstoke, Andover, and Tadley.

It is well known that it adds to the difficulty of creating a satisfactory new town if there already exists a large community on the site. Basingstoke, for instance, has a population of over 20,000. To the difficulties of creating a new twentieth-century environment is added the problem of redeveloping a partly outworn town and reconciling its interests and demands with the new development.

The expanded town programme has not, so far, proved a conspicuous success or engendered much enthusiasm. An LCC new town, remembering the LCC's great architectural standards, could be the prototype for an urban development appropriate to this age, and for the future, and be the yardstick by which the standard of new and expanding towns in England should be measured as Cumbernauld promises to be in Scotland.

Hampshire wants the LCC to help them expand Basingstoke on a much bigger scale than the 12,000 rehoused Londoners already proposed. This is not nearly so attractive a proposition as a new town. Hampshire have done little to indicate that they are capable of such a task.

A strong case can be made for a more intensive programme of expanded town development. But an even stronger case can be made for the creation of new towns when the creators have the high standards and imagination of the LCC.



WON'T YOU BUY OUR PRETTY SERVICES?

Any moment now we're all going to be sold in the market place. The imminent Architecture Week, planned by the RIBA, will be the beginning of a campaign to tell the layman how useful we are to him. This is a good idea so far as it goes, and I only hope it doesn't go far. We mustn't over-sell ourselves. After all, the public are fairly tolerant about the occasional, intense aesthete who forgets a staircase; but they wouldn't be so tolerant if he had been sold to them too slickly. And anyway, if our trumpets are loudly blasted we shall soon get some counterblasts. One has been sounded in advance by the *Spectator*. I quote:

*

"The man who employs an architect has every right to hope that his troubles are over. But they may be just beginning. You see, there is nothing magic about being an architect. No school of architecture guarantees to produce a man of taste. The country is littered with people who have studied architecture for five years, and practised for four times as long without ever being troubled by a lively imagination, a feeling for good proportions or a knowledge of new



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An illustration from the Sunday Times of May 8 showing an artist's impression of Hyde Park Corner. See Astragal's comment below.

material and building methods. So when you are advised by the architect's Institute to use one of its members, don't forget that although it is probably better to employ a bad architect than no architect, there are far too many bad architects to choose from—there are plenty of good architects about, but the country will not be saved from its creeping growth of squalid new buildings unless it has more good clients—men who can spot the good architects."

*

True enough. And the way to get good clients is to reach them with good propaganda. So let's hope the RIBA's propaganda, including the text of its touring poster exhibition, which we shall soon be seeing, will be frank and informative and not naive and obscure.

NOT MY TYPE

I was appalled the other day to hear of a magazine changing to a lighter type-face to encourage people to read it instead of merely looking at the pictures. I am never persuaded to read a magazine because of the type or layout used. In fact, it's fairly safe to say that editors who think too much in terms of square inches of words are producing something unreadable. The best reading matter is usually found in articles looking like badly hung wallpaper in periodicals printed on something resembling blotting paper. Still, I'm prepared to concede that good layout can make reading easier, and I was glad to see the new-look *RIBA Journal* for May taking an interest in this sort of thing. I was interested to find the *ARCHITECTS' JOURNAL* being compared unfavourably with the

journal of the Bristol and Somerset Society. The sample on this page shows how an article written and laid out by Dargan Bullivant (on classification*) looked in the *AJ*, and how it looks in re-vamped Bristol fashion. I suppose the tables are easier to follow, if less striking, in the new form; but to me it seems the Bristol boys have gone wrong in using a sans serif typeface throughout—the admirable "modern" face of the 'thirties, which is splendid for tables but difficult to read in quantity.

GET OUT THE TANK TRAPS

Mr. Cooke thinks the mutilation of Hyde Park for traffic re-organization is a pointless sacrifice. This Mr. Cooke is not a traffic expert, but he is Mr. Alistair Cooke and his views are impressive because they were made in his *Letter from London* broadcast during the Wedding Week. If this seemed an important subject to him at such a time, he obviously spoke with feeling. He also speaks—though as a layman—with experience, because he says Americans have found that road widening in city centres attracts more traffic than ever and makes congestion worse. This is something our own experts, including Colin Buchanan, have been saying for a long time.

*

Incidentally, I hear that Winchester has built a wide carriageway around a medieval gateway. Wouldn't it be better for cities to restore the portcullis and repel the invading motor-car? The dear old Temple Bar is still mouldering in Herts. How about digging it out and using it—together with replicas—to filter toll-paying traffic into London?

* September 17, 1959.

A sample of the layouts for Dargan Bullivant's article on classification. Left, Bristol fashion. Right, *AJ* style. See "Not My Type"

FINISHES	
Accessories for Finishes	
Finishes, External: General	
(41)P Finishes, external: Plaster, Rendering	
(41)S Finishes, external: Tiles	
(41)U Finishes, external: Claddings	
Finishes, Internal: General	
(42) Finishes, Floor: General	
(43)E Finishes, floor: Concrete	
(43)Hi Finishes, floor: Wood strip	
(43)S Finishes, floor: Tiles, clay concrete	
69.025.3	
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FINISHES	
FINISHES, EXTERNAL: GENERAL	
(41)P Finishes, external: Plaster, Rendering	
(41)S Finishes, external: Tiles	
(41)U Finishes, external: Claddings	
FINISHES, INTERNAL: GENERAL	
(42) Finishes, Floor: General	
(43)E Finishes, floor: Concrete	
(43)Hi Finishes, floor: Wood strip	
(43)S Finishes, floor: Tiles, clay concrete	
69.025.3	
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69.025.334	

JEKYLLING HYDE PARK

The sketch above appears in a recent *Sunday Times* and caused questions to be asked of Richard Edmonds, the Chairman of the LCC's Planning Committee. Was it someone queried an accurate representation of the Hyde Park Corner layout? Fairly accurate as regards the traffic layout, replied Edmonds, provided one pair of directional arrows is transposed, but the impression given of the private development in Park Lane is not so accurate.

*

One hopes not. The tower of the Clore-Hilton Hotel has been drawn to appear 400 rather than a mere 300 ft. high. But even allowing for such exaggeration it seems oddly out of place. There is a good argument for keeping buildings around the Parks below tree-height, so that they do intrude visually into them. But such an argument might be ignored if a high, or a number of high, buildings made a great visual contribution to London. The perspective, even allowing for distortion, shows that Lewis Solomon, Kaye and Partner's design for the hotel, sited where it is, will not do that.

*

This depressing sketch also shows that Apsley House, the Wellington Museum, is free-standing. The MOW tell me that there are plans to face the newly exposed east elevation with Clipsham stone. Here is a façade to design to tax the ingenuity of a Raymond Erith, though no doubt the ancient monuments section of the MOW could make a very good job of it too.

LUNCH, BC

Basil Spence was in the chair as President at this year's Building Centre lunch at Claridges, and paid a warm tribute to the man he has succeeded, the late Sir Giles Gilbert Scott. He recalled that he had first met Sir Giles in the same hotel, shortly after Sir Giles's design for Coventry Cathedral had been "turned down by the Royal Fine Art Commission." Spence was treated with great kindness and consideration and Sir Giles always thereafter asked after the progress he was making on Coventry Cathedral.

ASTRAGAL.



COMPETITION

Midlothian County Offices results

The first prize of 750 guineas for the design of an extension to the Midlothian County Buildings, Edinburgh, has been awarded by assessor J. Wilson Paterson to Messrs. G. Reid and J. S. Forbes of Edinburgh. The second prize of 500 guineas goes to D. H. Macpherson of Glasgow, and the third prize of 350 guineas was awarded to Albert D. Cordiner of Glasgow. The competition was limited to architects practising or resident in Scotland. Only ten entries were received.

HOSPITALS

Hundreds of architects wanted

As the new hospital building programme gathers momentum the demand for more architects in this highly specialized field is rising sharply and the fifteen Regional Hospital Boards in England and Wales are taking steps to augment their design staffs.

The Ministry of Health hope that a stimulus to the recruitment of suitable qualified architects will be given by the new scale of salaries for Regional Hospital Board staffs which come into effect on July 1. At all levels salaries have been stepped up, at the top by more than £1,000. The highest salary ranges are now from £2,500 to £3,400 a year for regional architects and engineers, and from £1,765 to £2,365 for their respective deputies. Principal assistant architects, engineers and surveyors will receive from £1,665 to £2,135 according to scale, senior assistant architects and surveyors £1,300 to £1,600 and assistant architects and surveyors £905 to £1,310. A new engineering general grade will range from £910 to £1,600 a year. Draughtsmen and other members of the hospital architectural, engineering and surveying staffs will also receive increases.

By comparison with the existing salary

scales the increases at the top level are £1,045 for regional architects and engineers, £695 for deputy regional architects and engineers, £625 for principal assistant architects, engineers and surveyors, £355 for senior assistant architects and surveyors and £255 for assistant architects and surveyors.

Special Posts: The Minister of Health has also informed Boards that he is prepared to sanction, in certain circumstances, special posts of assistant regional architect within a salary range of £1,775 to £2,175. Those appointed to such posts would be responsible for the work of one or more of a Board's design teams engaged on major schemes to a total value of about £1 million or more, or work of commensurate importance. Already most of the Regional Hospital Boards have taken advantage of this suggestion by Mr. Derek Walker-Smith and have advertised for assistant regional architects.

Courses in Design: It is emphasized by the Ministry and hospital authorities that hospital design experience is *not* essential in applicants for appointment to the new assistant regional architect posts, provided that they possess good designing ability and practical experience. These posts, therefore, should appeal to younger architects anxious to broaden their experience in the new, important, particularly interesting and rapidly developing field of hospital building.

To familiarize architects with the basic principles of the subject special courses in hospital design and planning have been arranged. One has been organized by the Royal Institute of British Architects at their London headquarters from July 11 to 15 and is specially intended for those without previous hospital experience. The object of the course is to give architects background information about the National Health Service, user requirements, trends in medical and architectural planning and the latest research. This course will be supported by a hospital design exhibition specially arranged by the Ministry of Health which will open in the RIBA on July 7.

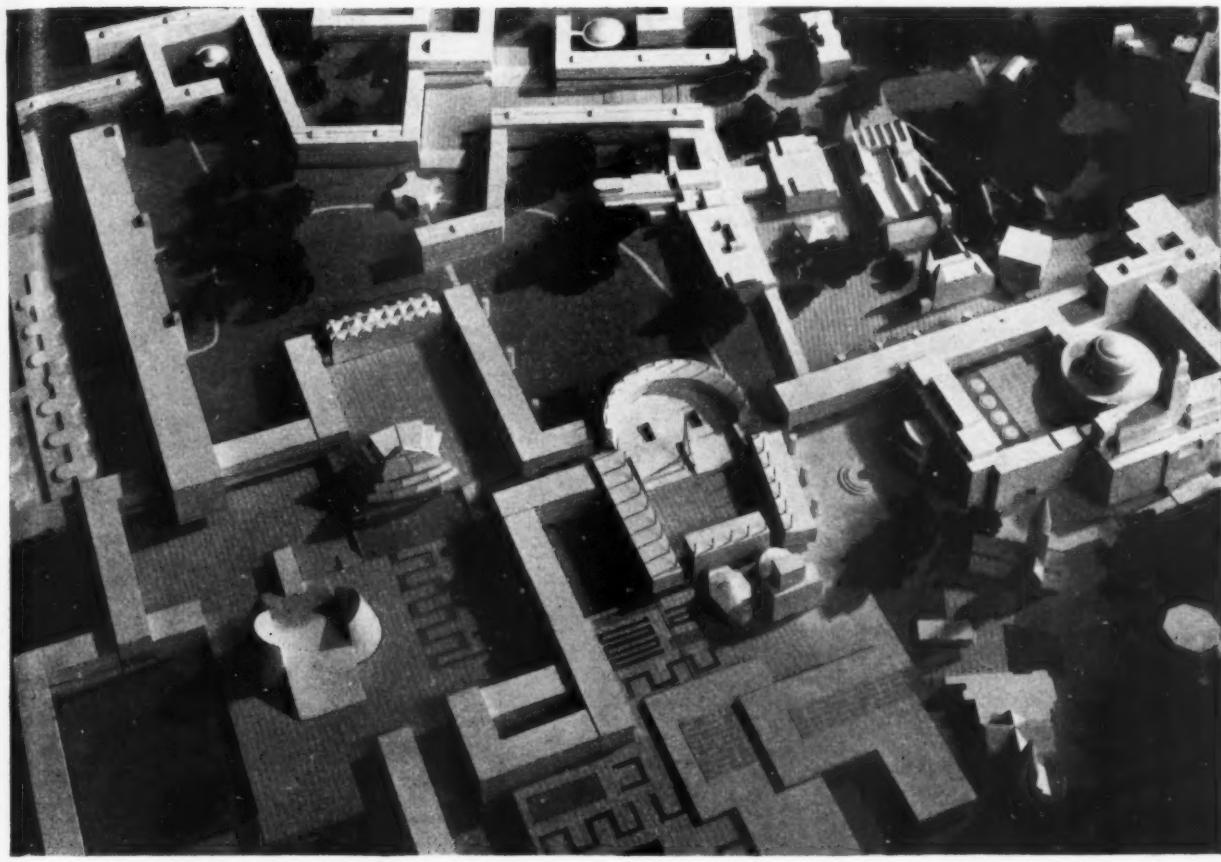
The second course, restricted to the staff of the Regional Hospital Boards, is a residential course arranged by the Nuffield Foundation at Worcester College, Oxford, from August 22 to September 15. This is specially planned for senior architects recently appointed particularly the assistant regional architects and the principal assistant architects. It will cover the subject in much more detail, dealing on the one hand with design and planning of individual hospital departments and on the other with many special aspects such as the prevention of cross infection, heating and ventilation, lighting, appointment systems, building economics, and environmental studies.

In order to achieve the expansion of the hospital building programme it is estimated that several hundred architects will shortly be working on hospital design for the first time, either in private practice or in the Regional Hospital Boards. Capital investment in NHS hospitals is now £25½ million. For 1961/62 it will be £31 million.

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The design by Chamberlin, Powell and Bon showing the proposals contained in the Leeds University Development plan. On the right is part of the Parkinson Building (by Lanchester and Lodge) which is now being extended. At the top of the model are the basic proposals for accommodating 2,500 students in the university

precinct. In the foreground is the series of courts round and within which it is proposed the new university buildings should be grouped. Here are proposals of considerable imagination and promise and a far advance on the sketchy plans illustrated in the AJ of January 9, 1958, before the architects were appointed.

EUSTON

Great Hall To Go

The consultants appointed by the Council to advise on the engineering and architectural aspects of the proposals of the British Transport Commission for the reconstruction of Euston Station have reported that it is not possible to produce a workable alternative scheme which would meet the requirements of the London Midland Region while preserving the Great Hall. The Town Planning Committee state that they regret that the retention of the Great Hall has not proved practicable, but they are satisfied that every possible alternative has been examined and they accept the consultant's advice. The consultants also endorse the Committee's view that the Doric Arch could and should be removed from its present site and re-erected on another site; they feel that, ideally, it should stand astride one of the main pedestrian approaches to the station. The British Transport Commission's approximate estimate of the cost of reconstructing the arch is £180,000.

The three consultants were: engineers J. E. G. Palmer of Messrs. Rendell, Palmer and Tritton, V. A. M. Robertson of Sir William Halcrow and Partners, and architect P. F.

Shepheard of Messrs. Bridgewater and Shepheard.

ILA

Symposium On Design

The subject of designing for pleasure and hard wear in the landscape has been chosen for a symposium by the ILA because redevelopment in congested conditions and new development at lower densities than those to which the inhabitants have been accustomed raise new problems for the landscape designer. The symposium will be held at the RIBA on May 24.

Analysis indicates that the chief problem is set by the citizens themselves for, while ecology and micro-climate, for example, are understood by the designer, human behaviour in unfamiliar surroundings is not. Very little study has been given to it. This is a gap which needs to be filled for much post-war work has failed to be effective because its designer was not equipped to anticipate the effect of user's behaviour on his scheme and to make allowance for it in his original design.

Densities, children's incidental play habits, and the whole pattern of people going about their business and enjoying their leisure are involved.

The purpose of the ILA Symposium is to assess the problems, to examine some solutions, and to suggest fruitful channels for further investigation and research. Speakers will be: sociologist Margaret Willis; architect David Randall; landscape architect Bodfan Gruffydd. Applicants should write to the Secretary, Institute of Landscape Architects, 2, Park Crescent, London, W.1.

MURALS

Funds Available

The Edwin Austin Abbey Memorial Trust for Mural Painting in Great Britain states that it has funds at its disposal for commissioning mural paintings and would be pleased to consider applications. It is within the discretion of the Committee of the Fund to select the buildings and sites for such paintings and the artists to be employed, subject of course to the terms of the Trust. The two chief provisions are that the paintings shall be in a public building or in a building belonging to a charitable institution in Great Britain and that only those artists who have proved themselves draughtsmen, designers and mural painters of a very high order shall be entrusted with commissions.

Design Centre Awards 1960

Today the Duke of Edinburgh is presenting certificates to the manufacturers who have made the products illustrated below and on pages 751 and 752. These items have been selected by a panel consisting of Misha Black, Mrs. Jo Patrick, Lady Casson, J. Beresford-Evans, and F. H. K. Henrion, who consider them to be outstanding for "originality, workmanship, economy, or some other quality which makes a real contribution in their industries." The panel would seem to have succeeded in their unenviable task in maintaining the standard of previous years and their report indicates a critical attitude of mind and an interest in function as well as appearance. As yet, of course, these awards do not include any indication of what is "best value for money."

1. *The Duke of Edinburgh's prize for Elegance goes to the Spode "Apollo" range of dinner, tea, and coffee ware designed by Neal French and David White (who receive a prize to cost not more than £100) and made by W. T. Copeland and Sons Ltd. The judges describe the shapes as logical, simple, easy to handle and practical and the family character well carried through the range. In fact there are two, markedly different lines: simple ogee curves and barrel-profiles. The handles on the pots are a little thin for comfort and too small on the tureen and the oil bottle. The overall effect, however, is indisputably elegant. Prices: for 6 persons, dinner set, £30 17s. 0d.; tea set, £11 14s. 0d.; coffee set, £9.*

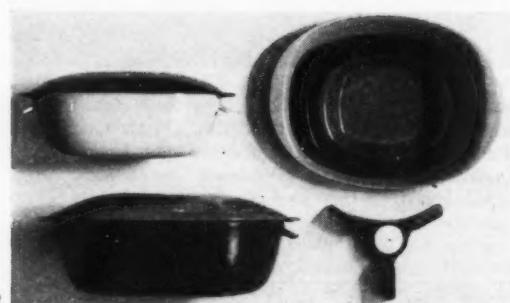


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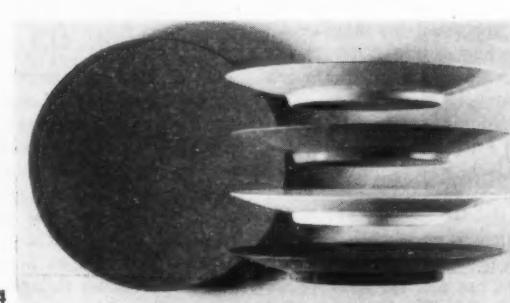
3

2. *The cast-iron, vitreous enamelled casseroles and dishes were designed by John and Sylvia Reid and made by Izons and Co. Ltd. (Trade name: "Anniversary ware"). The covered dishes are in 3, 5, and 9 pint sizes. All are attractively coloured in blue, green or charcoal. The tricorn stand, which contains a night-light heater, is rather small for the task. One judge thought the lid hard to remove with a cloth if hot. Prices: from £3 13s. to 17s. depending on size and whether covered or not.*



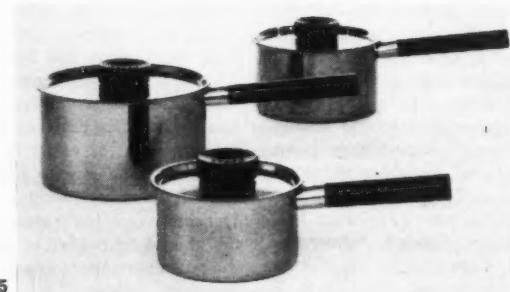
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3. *The nursery china, "Queensberry ware" above, was designed by David Queensberry (shape) and Bernard Blatch (pattern) and made by Crown Staffordshire China Co. Ltd. The judges describe the red animals as gay and [not] coy, and regret that the bear is too high on the bowl. Price: £1 1s. 0d.*



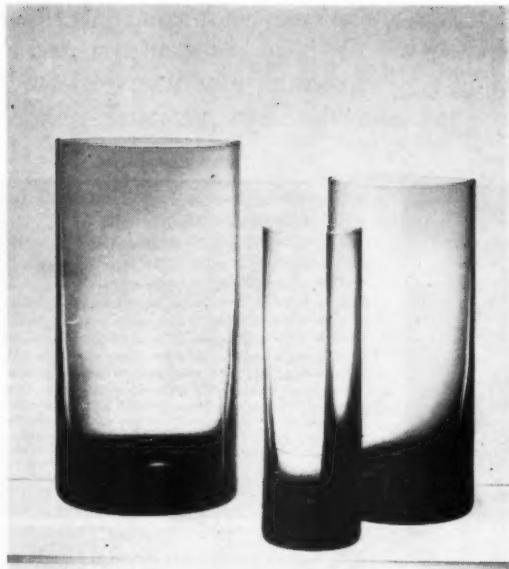
4

4. *The Melamine plates "Fiesta" were designed by Ronald E. Brookes and made by Brookes and Adams Ltd. Colours: blue, red, green, lime yellow, black and white. The judges describe them as gay, and of excellent shape. Price: 9s. 6d.*



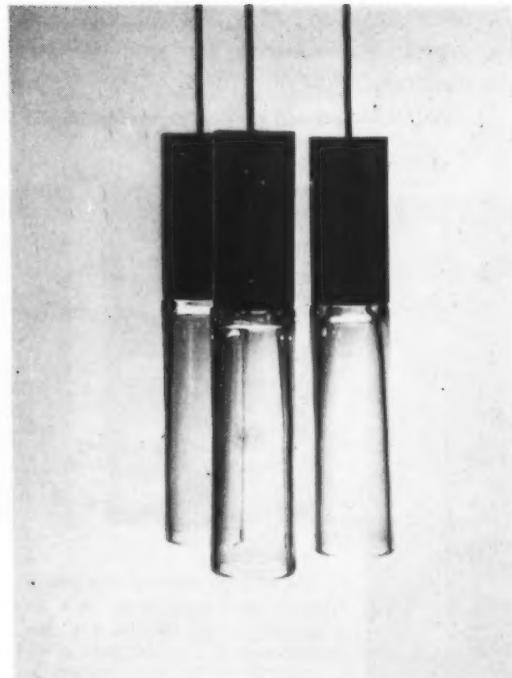
5

5. *The stainless steel alloy saucepans, "Judge" described, inexplicably as stew pans, were designed by the Design Research Unit and made by Ernest Stevens Ltd. The usefully large knobs unscrew, so one fears for the life of the thread. The judges commend the neat join of handle and bowl. Price: £7 5s. 0d. the set.*



6

6. The "Lemington" vases are coloured a dark steel blue, amethyst or gold, and were designed by R. Stennett-Willson and made by G.E.C. The judges were pleased with the proportions and the junction of base and body. The largest is 5 ins. by 10 ins.; the smallest 2½ ins. by 8 ins. Prices: £2 10s. 0d.; £1 12s. 0d. and 16s.



7

7. The judges found attractive the relationship of the sharp black metal and the thick coloured glass, in this light fitting by Atlas Lighting Ltd. designers Richard Stevens and Peter Rodd. The effect, they state, of the specially designed bulb throwing light into clear, amber, pale rose or blue handblown crystal glass is rich. The price, appropriately, is £20 19s. 9d.



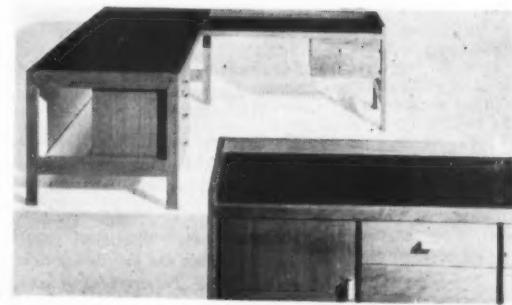
8

8. The spotlight has a matt-black anti-glare ring round the anodised aluminium reflector and the neat transformer is stove enamelled black and white. It is made by Atlas Lighting Ltd. and was designed by Richard Stevens. Price: £4 12s. for both items.



9

9. The Brownie camera by Kodak, designed by Dr. F. H. G. Pitt in consultation with Kenneth Grange, is a rather pretentiously styled version of the simple box camera. Adjustments are limited to two aperture sizes. It is, however, as the judges state, easy to load, and hold. It produces very competent photographs for the price (which is £2 14s. 1d.) according to an excellent report in Design for December, 1959.



10

10. Most AJ readers will be familiar with the range of office furniture designed by Brian Henderson of Yorke Rosenberg and Mardall and made by Bath Cabinet Makers. It won a joint first prize in the TDA competition. The judges call it ingeniously interchangeable, reasonably priced, robust yet elegant. "It will be as acceptable in an office in ten years' time as it is today" they state; a comment which should surely apply to all award winners. Price: the unit in the background would cost no less than £60 18s.

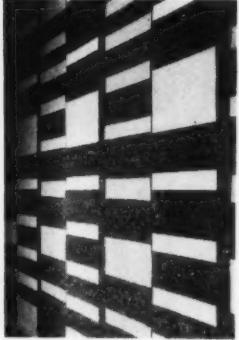
Design Centre Awards 1960 (continued)

11. "Here," say the judges of the lamp standard, "is a real contribution to the problem of street lighting." A judgment with which few will quarrel. It is in two sizes, a 15-ft. column and a 20/30-ft. column; and has been designed solely for urban use. Like all smoothly detailed designs dirt is readily visible on the shiny surfaces, but it is refreshingly simple and, at £15 for the small column, as cheap as, or cheaper than, any other on the market. Designer: Richard Stevens, and made by Abacus Engineering and Atlas Lighting.

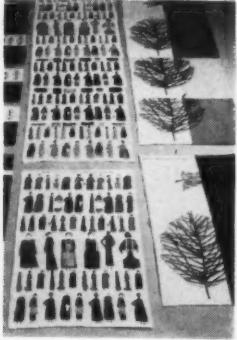
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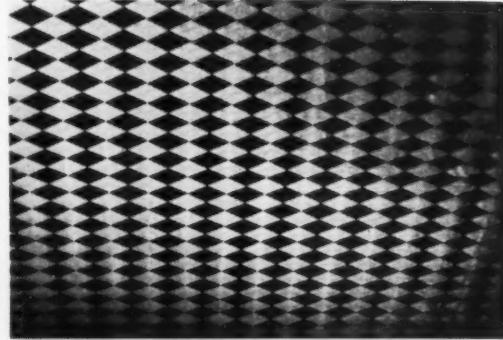
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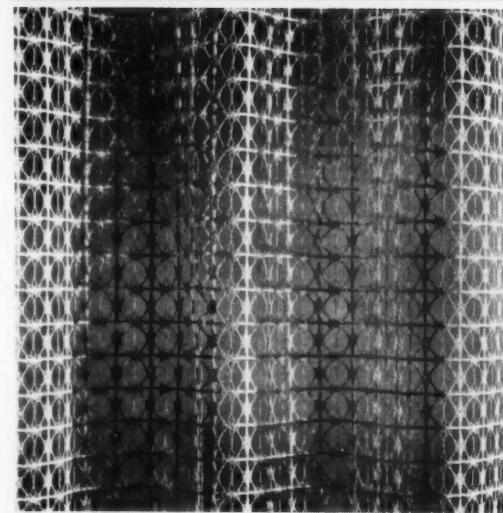


12. The wallpaper consists of large panels of rather dirty strong colours (magenta, ochre, orange, green) on a mottled black and grey background. It costs £9 10s. 4d. a 12-yard roll. Designer Humphrey Spender; made by The Wall Paper Manufacturers Ltd.

13. The drying-up cloths are by Lucienne Day and made by Thomas Somerset & Co. Ltd. The designs are in good colours, state the judges, and of a quality rare in this type of product. Price, 4s. 11d.

14. The PVC coating on fabric is intended for wallcovering. Made by ICI, it is designed by them (led by F. J. Hoswell).

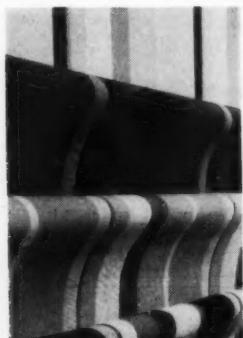
15. The furnishing lace of cotton, reinforced with Terylene, was designed by F. G. Hobden and made by the Clyde Manufacturing Co. Colours: white and biscuit. Price: 8s. 11d. per yard for 60-in. width.



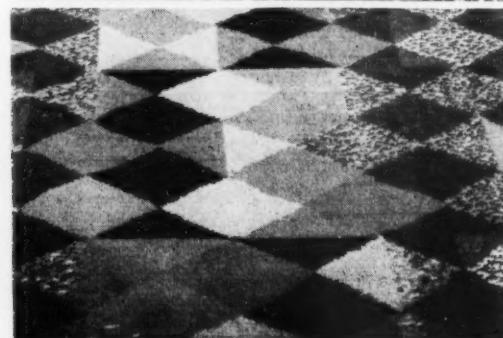
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16. The Axminster carpet, designed by Graham Tutton, and made by Tomkinsons Ltd., costs £2 10s. 6d. a yard, 27 in. wide.

17. The linen and cotton striped fabric is made by Donald Brothers Ltd. and designed by them (chief designer, P. M. Simpson). Price 37s. 6d. a yard, 54 in. wide.

18. The cotton satin furniture fabric consists of dull and sharp colours on a lustrous surface and the effect is rich. Designer: Shirley Craven, and made by Hull Traders Ltd., it sells at £1 17s. 6d. per yard (48 in. wide).

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RIBA Candidates' Replies

We publish today the replies from candidates for election to the RIBA Council to the three questions we sent them. We have been informed by A. G. Sheppard Fidler's secretary that he is on holiday abroad and therefore could not reply: all other answers received up to going to press are printed below. Candidates are divided into Fellows, Associates, and Licentiates, but printed in alphabetical order in these categories.

Fellows' Replies

WHAT IS YOUR REACTION TO THE PILKINGTON REPORT AND WHAT ACTION SHOULD THE RIBA TAKE NOW?

LIONEL BRETT

No surprise. Whereas every primitive community had its scribe, witch-doctor and master-builder, architecture is a refinement requiring propaganda. But public relations are self-defeating if dishonest, and we must therefore have

- (a) A better environment to offer, and a clear vision of it (architect's role in town planning)
- (b) Unchallenged authority in building design (economical planning and structure, cost control, honest eye to maintenance)
- (c) Specialization to meet present-day needs, both within the office and in our various roles in the building industry. RIBA committees are already at work in all these fields, and when each knows what it wants we shall be strongly placed to
- (d) Offer the public a better service (public relations)
- (e) Charge more for it (scale of fees and salary structure).

Life is too short for each of these moves to wait on the other, but we shall not be strongly placed on (d) and (e) and thus be able to raise our comparative status, until we have got a lot further with (a), (b) and (c).

In principle I am for basic training for all managerial personnel in the industry, followed by specialization into professions, followed by postgraduate training for a tiny minority which has the gift to lead and inspire a big outfit. To call this a "2-tier profession" is Marxian-type over-simplification, since increasing complexity of building will need contributions of many kinds. (e.g. architect/planner, architect/engineer, etc.)

Depends on the office. The one thing *all* should do is to support new RIBA service which seeks to disseminate bright ideas. Soundest rule I know: don't run before you can walk!

JANE DREW

The value of architects is not sufficiently recognized, their income level is too low and the scale of fees requires revision. Public relations requires to be intensified so that the value of architects and of *good architecture* is more recognized and the importance of an architect who is in full control of work and with full responsibility is emphasized.

PETER DUNHAM

The statistics published in the Pilkington Report confirmed my opinion that we, as architects, were not getting our "share of the cake." The RIBA has already started and should now press on to get further statistical information from its members in private and official practice and then take steps to:

- (a) revise the RIBA scale of fees to give increased remuneration; the Practice Committee are already considering this. I think there is a case for a differential scale, also a graduated scale to show an increase in the percentage fee for jobs under £50,000 and perhaps a decrease for those over say £500,000.

- (b) present a strong case for the increase of salaries of official architects.

This could be a good idea; it requires thought and study but there must be a way through from one to the other so that merit and talent can be recognized. In my view architects who are not doing their job properly as architects are those who accept positions in which they are not in full control of the work and no longer independent. The building industry, too, requires education. I think that splendid work has been done by the Council of Industrial Design in educating the public to the value of good design by showing good design. Something along the same lines should be done about architecture.

Quality in architecture being the most important factor, real efficiency can be achieved by an attitude of dedication. This is likely to take place in a climate of public interest and right values. It would to my mind be a wrong thing if a two-tier profession were devised in such a way that a young man of talent and ability could not be given large and important work to do. The right aim is that first-class architecture should be rewarded and this will only be done by intensifying public interest both in architects and in architecture itself.

I am in favour of a two-tier profession, with proper recognition and facilities for training of the technical draughtsman. This should help to raise the standing of the architect. More emphasis and time should be given in the schools to office management, architectural practice and the technique of building at the expense of design. This would not be so much fun for the students but would produce a more efficient profession and in the end better architecture. Proper knowledge and grounding in these subjects are essential when a graduate leaves school and in the immediate years after school he can develop his potential to design.

A lot! This is bound up to some extent with low remuneration to the profession. Most offices are understaffed but cannot afford to increase—a vicious circle. Each office should make an effort to break out. A lot of good advice has been preached at various symposia and conferences, this should be accepted. A standard "Bible" is required to lay down routines, drills, etc. for the whole profession. The RIBA Management Committee are working on this sort of thing, the sooner it comes the better—meanwhile each office should start its own.

WHAT ARE YOUR VIEWS ON THE EDUCATION OF ARCHITECTS (WITH PARTICULAR REFERENCE TO THE TWO-TIER PROFESSION) AND THE BUILDING INDUSTRY?

WHAT IMMEDIATE STEPS SHOULD ALL ARCHITECTS' OFFICES TAKE TO IMPROVE EFFICIENCY?

Fellows' Replies (continued)

WHAT IS YOUR REACTION TO THE PILKINGTON REPORT AND WHAT ACTION SHOULD THE RIBA TAKE NOW?

E. MAXWELL FRY

I have never before given these views that you ask for from candidates for election, because it is often quite difficult to express an opinion on matters which can only be decided upon in Council when all the circumstances of the matter are available for discussion. With this proviso therefore I will give you my off the cuff reactions to your questions as follows:—

The Pilkington Report discloses a situation which has probably always existed and it is not necessarily shameful and should certainly not lead to any action on the lines of keeping up with the Joneses, but should cause us to review the structure of our profession and its usefulness to the community.

H. J. WHITFIELD LEWIS

My first reaction to the Pilkington Report is that the profession gets what it deserves. I do not seriously suggest that architects are basically more inefficient than doctors, dentists or actuaries but the results of their inefficiency are very much more obvious. I think the RIBA Council's decisions on action to be taken are pretty comprehensive (see AJ of 17.3.60) but much more attention needs to be given to publicizing the work of the architect. There is so much leeway to catch up. Compare the position of the architect in Scandinavia with that in this country. Use TV more.

ARTHUR LING

There is no simple answer to the Pilkington Report. Our value to society is determined by the quality of our work, the demand for our services and public appreciation of architecture. And these are interrelated. We must therefore raise the standard of architecture and this starts with training, insist that all buildings are designed by architects and that local authorities have Chief Architects, and improve still further our public relations work. Higher fees might, at this break-through stage, lead to less work, but in large private offices it is better to pay more to the staff than more to the Commissioners for Inland Revenue. In public offices the Chief Architect should be given flexibility within a total salary bill related to the RIBA scale of fees and allowing for overheads, to fix salaries according to merit and proved worth. The rigid national scales do not allow for quality and output. Architects cannot be dealt with on the same basis as comptometer operators.

WHAT ARE YOUR VIEWS ON THE EDUCATION OF ARCHITECTS (WITH PARTICULAR REFERENCE TO THE TWO-TIER PROFESSION) AND THE BUILDING INDUSTRY?

WHAT IMMEDIATE STEPS SHOULD ALL ARCHITECTS' OFFICES TAKE TO IMPROVE EFFICIENCY?

We should do everything possible to increase the quality of architecture by paying still greater attention at, I suggest, certain points where the highest level of instruction can be provided and by safeguarding the entry. It would be a disaster to create a level of assistance without hope to reach the top and I would not like to run a "two tier" office. It is against the spirit of architecture. I suggest we should examine the other two tier structure, *i.e.*, architects who control their work and those who do not and this with particular reference to the growing commercial organization of architectural practice.

I do not understand this question as some architects' offices are too efficient, if efficiency is to be the end. What we want is good architecture and there are many ways of doing it.

It is good to see that the College of Architecture and Building Technology is now launched. The joint education of the key personnel of all sections of the building industry, at least during the initial period of their training, is the obvious pattern for the future. Knowledge of each other's problems will produce the mutual respect necessary to put the architect back into his proper place as the leader of the building team. Although there is still much resistance to the two-tier profession among architects it is quite inevitable with the increasing complexity and industrialization of building. I think joint education will help greatly in getting it accepted.

This is a big subject and much has been written about it recently. I would spotlight:

- (a) Make clients give a proper brief.
- (b) Give accurate estimates by proper cost planning with your quantity surveyor and consultant.
- (c) Institute standard procedures for all routine matters and use standard printed forms as far as possible.

I am against the idea of a two-tier profession but I am in favour of the RIBA being responsible for the training of specialist contributors to the work of the profession and the building industry, as it does, at present, for District Surveyors. There are quite a number of aspects of architecture (*e.g.*, maintenance of buildings, preservation of historic buildings, surveying building techniques, research) where specialization is required. Also I see no reason why the RIBA should not sponsor a course in draughtsmanship, but this is quite a different matter from establishing a two-tier profession. We should reject any sort of consolidation status for those who cannot meet the raised standard of entry.

Competent architects are efficient. A planned programme helps. This is feasible in public and large private offices but difficult in small private ones. Group practices should be encouraged. Good clerical assistants could reduce the amount of paper work for the architects. Good organization is a constant struggle and is more easily achieved if everyone in the office is involved in it. There is no magic formula—just hard work.

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E. D. JEFFERISS MATHEWS

The Report infers that we have not reached the proper status in which we should stand. The RIBA action should be to: (i) increase the entry standard of general education; require a higher standard of technical education; adopt modern methods of "selection" additional to examinations. (ii) initiate research into the reasons for our low status and make it available to the profession for improving office organization and an awareness of "the client's point of view." (iii) continue to bring before governments the need for a higher status for architects in local government service. (iv) review the scale of fees to consider a new scale graded on cost and/or type of building; consider the desirability of introducing an "all in" scale to include engineers and/or quantity surveyors.

EDWARD D. MILLS

The Pilkington Report reveals that architects' incomes are among the lowest of professional incomes in the country, and this appears to be due to the fact that there are too many architects. In no other profession are qualified members used so extensively in subsidiary positions, and it is this factor which is the primary cause of the low level of income. The RIBA must seriously consider the question of a two-tier profession, so that the architect's work can be spread more adequately and greater use made of other forms of professional assistance. There are many jobs which the architect now carries out, which could be done under his supervision by personnel who are not architecturally qualified, and the whole position needs to be thoroughly examined and the problem of the two-tier profession tackled.

J. H. NAPPER

The Pilkington report included comparisons of the remuneration received by the different professions in different age groups. The lower paid professions included those (like surveyors, engineers, and architects) employing assistants who are also qualified by professional examinations. Doctors, dentists, solicitors, actuaries and barristers do not employ qualified members as assistants to anything like the same extent, if at all. Even so, the increasing demand on the architect's skills are forcing the profession to point where these skills warrant a higher reward if a full service is to be provided by the architect. Agreement on this by independent and by salaried architects, and concerted action through the RIBA is the obvious course.

R. DUNCAN SCOTT

(i) The Pilkington Report leads me to suggest (a) that architects are badly trained for the post-war problems of building, and/or (b) that the general public has an unfortunate lack of appreciation of the services which the profession can give, and/or (c) that the Institute has made a great mistake in supporting a policy of recruiting all entrants into the profession in a low-grade Associateship class, and/or (d) that the scale of fees is too low. (ii) (a) The Institute must give urgent attention to education, both in the schools and in the office (see below). (b) To increase the public's appreciation of the architect, the latter must first prove that he is efficient and indispensable. Once that is established, then only can an all-out drive be made to make the public architect-minded. It is also important that the profession should be more united and speak with one voice, and unequivocally state that it stands for twentieth century architecture. (c) No private practice or architect's department can afford to run economically—or even at all—on the basis that all its technical staff are qualified architects, if such staff are to be adequately rewarded. It appears essential to revert to the pre-war practice of the employment of a large proportion of unqualified technical assistants and draughtsmen. (d) The scale of fees requires revision and adjustment, and parts of the scale could be immediately revised. Any major upward trend must, however, await the increase in the general efficiency of the profession.

I support the principle of the "two-tier" profession and combined training with the building industry (also with engineers) at both pre- and post-graduate stage. Greater emphasis should be placed on technology and economics—less on aesthetics—on the principle that aesthetic competence is a gift which will emerge if it exists—if it does not exist the student should not become an architect. Modern methods of selectivity should be able to determine this without excessive studio work.

Revise their administrative procedure. There is no better way of finding out defects and rectifying them. Always prepare pre-building programmes for every job however small. Follow the codes and recommendations of the Joint Consultative Committee of Architects, Quantity Surveyors and Builders; read and observe the recommendations of the Joint Contracts Tribunal and the reports of the various study groups—and attend them whenever possible. And remember the fact that most clients judge their architects, not on the quality of their architecture, but by whether the building cost what the architect said it would, and that it was finished on time.

There is a wide field for experiment in architectural education, and there is no single course of training for architects which should receive priority over all others. The present centres of architectural education are situated in Universities, Colleges of Art and Technical Colleges, and it is right that this should be so. At the moment many of the schools of architecture fail to take proper advantage of their special background, and there is far too little communication with other technical and professional students. There is a strong case for joint training in certain centres for architects, builders, engineers and others concerned with the building industry, and the proposed London Regional College should form an interesting experiment.

It is difficult to say what architects' offices should do in order to improve efficiency. For although architects generally appreciate the need for efficiency on building sites, the problem has not been taken seriously in their own offices. There is very little which individual architects can do, but what is needed is centralized research, probably by the RIBA, into the whole question of office organization, and the profession would benefit greatly if advice were available to offices which need it on the modern techniques of office organization. If a second category of staff were available, this could assist in office efficiency, as a great many of the operations carried out in an office could be the responsibility of specially trained people, who were not necessarily qualified architects. It seems to be essential, therefore, that the question of a second category should be pursued with the utmost urgency.

The Oxford Conference report includes the basic aims for architectural education. Each school should be encouraged to make its own special contribution to educating the architect, to post-graduate research and in the provision of refresher courses. If the members of the building team are to share some stage of their education the question of the basic academic requirements of non-architect members remains to be decided.

One is tempted to ask whether the editor has stopped beating his wife. Have architects more need to increase the efficiency of their offices than, say, contractors? So long as it is impossible to plan work for a given number of staff owing to the innumerable imponderables involved in starting a job, there are few immediate steps one can take. A minor immediate step might be the adoption of the SFB system of classification, and the use of the waste paper basket for all non-conforming trade literature.

I would make the standard of entry into the profession much higher both at the initial stage and at the final stage, and thus restrict the number of qualified architects, at the same time increasing their standard of training. I would advocate the cutting out of much dead wood, a form of sandwich course, the introduction of building economies, and possibly a post-graduate specialist course. I would also advocate a form of training for technical assistants, either sponsored or supported by the Institute.

In order to improve efficiency in the average architect's office, the Institute might give advice on office mechanization, standards, etc., run more courses for the practising architect and set up central information services for the pooling and distribution of knowledge and experience of new techniques, materials, etc. Such services would be expensive, and many architects in small practices might find little time to benefit from them. It probably means larger practices to enable firms to have their own libraries of information, and enable them to spend more time on research and attendance at refresher courses.

Fellows' Replies (continued)

WHAT IS YOUR REACTION TO THE PILKINGTON REPORT AND WHAT ACTION SHOULD THE RIBA TAKE NOW?

PETER SHEPHEARD

Not surprise, anyway, after 12 years in private practice! But *everything* must be done. There is only one solution—to make architects valuable, respected and indispensable; and in the end only one way of doing that—to do valuable, respected and indispensable work. But our public relations must be subtle, energetic and multifarious. Much has already been done, and there is a better public appreciation of architecture now than there was 20 years ago; but much more can be done. I am in favour of all forms of propaganda (except paid advertising which is useless to us) which will explain what architects can do, to those who can invite them to do it.

WHAT ARE YOUR VIEWS ON THE EDUCATION OF ARCHITECTS (WITH PARTICULAR REFERENCE TO THE TWO-TIER PROFESSION) AND THE BUILDING INDUSTRY?

WHAT IMMEDIATE STEPS SHOULD ALL ARCHITECTS' OFFICES TAKE TO IMPROVE EFFICIENCY?

The profession has two tiers now; because this fact is not reflected in the educational system much waste of effort and disappointment is caused. I am sure that adjustments could be made to the system which would enable people more easily to find the work they are best at. But if some take less training to do the easier jobs, others must be encouraged to take more, to do the harder jobs better still. And they should be thought of as branches of the profession, not tiers.

What a question! First, perhaps, finish all drawings before the work starts. Next, avoid doing architecture on the telephone or in letters—draw *everything*, all ways up. After that, realize how difficult it is to give clear instructions and how easy for even clear ones to be misunderstood. When I say efficient, I mean efficient in producing good buildings, and I am sure you do too, Mr. Editor; because, of course, it is easy to build more quickly (and more profitably!) if you let the architecture slip a little. And right now, *everything* depends on architects producing better buildings.

Associates' Replies

KENNETH CAMPBELL

The Pilkington Report simply confirmed what we all suspected. I think the RIBA ought to do two things at least: raise the scale of fees and intensify its efforts to improve the training of architects. I don't think increased fees would lose us work but if we are *not* worth more than we are getting now it's time we all got out and went into the contracting business. I remember much puffing and snorting by "sound people" (Priestley's phrase) when I said publicly a year or two ago that qualified experienced architects should have a salary of £2,000 a year. I still believe it and I shall go on saying so.

ANDREW DERBYSHIRE

The surprising thing to me about the Pilkington Report is that after displaying a mass of statistics it should have to fall back on intangibles like public esteem and social status to justify a rise for a group of professions that are already demonstrably doing better than most. There is nothing to stop the RIBA from mounting a campaign on exactly the same basis.

But since the architect's case is psychologically weaker than the medicine man's it will be as well to back it up with a rational claim based on the architect's share in a major sector of the national economy. Comparisons with the engineering industries would be useful.

But there is no sense in a public plea of this sort if it is not coupled with a continuous drive for a more efficient and responsible profession. Communications are most important. We are dreadfully weak on well presented technical information and a lively and honest exchange of professional experience.

I am not prepared to be dogmatic about the details of architectural education, but

- (1) At least a third of the staff must be actively in practice.
- (2) After the first two years the academic course must be interspersed with work in an office, on the site, and in a factory.
- (3) Some form of common education for at least a year of the course must be shared with builders, engineers and surveyors—though I don't think this can be realistically done until the Code has been changed to allow architect directorships in the building industry.
- (4) Only the dedicated must be allowed to qualify.

My opposition to the idea of a two-tier profession is so profound that it is difficult to express it shortly. It implies a division of responsibility for the overall conception of a building on one hand, and the detailed interpretation on the other, which would prevent it being architecture. Educationally of course such a division is complete nonsense.

(1) If it were a public or company office I would flatten the pyramid, raise the average level of pay and productivity, and try to run a collection of working groups, largely autonomous as far as day to day business is concerned, and related to some *real* sub-division of the work. One important incentive to efficiency following from this would be that group and job architects would get more individual credit for their work than they generally do now, and would carry real responsibility.

(2) Get rid of the repetitive drudgery by attacking the information problem with an office library run by full-time staff and attaching typist-clerks to each working group to ease the load of filing, scheduling, listing, minutiae, programming and routine letter writing.

W. D. The Pilkington disturbance review. The p. both RIBA admiring which plexity. As a consequence the fact we could bettering the an important not due to our action can

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W. D. LACEY

The facts contained in the Pilkington report are most disturbing. They make a very strong case for urgently reviewing the remuneration of the profession in terms of both fees and salaries. The RIBA staff have produced an admirable paper on the report which sets out the complexities of the issues involved. As a responsible profession it is correct that we should have the facts of our case before we consider altering the scale of fees and campaigning for better salaries. It is encouraging that the RIBA is making an immediate survey to ascertain these facts, but we should not delay too long in coming to our conclusions. The RIBA should be organized to take action on the best evidence we can collect quickly.

T. MELLOR

Like most architects I was shocked by the findings of the Pilkington Report and feel that this reveals clearly the cause of much of the discontent within the profession. The RIBA will have to consider two lines of attack on inadequate rewards for architects. These are:

- (a) The revision of the scale of fees to give adequate payment for all types and sizes of job, preferably coupled with a simple overall scale covering associated services, and
- (b) some method of ensuring a more equitable sharing of profits.

STANLEY MEYRICK

In all the Pilkington graphs and tables, except one, figures for surveyors do not include the earnings of those in public service. The one which does include public service surveyors (Table 9) shows a drop of 20 per cent. Figures for architects do include those in public service. It is therefore reasonable to suppose that the remuneration of this section may account for the low score of the whole profession. The RIBA should investigate this and, if it finds it to be so, strengthen their negotiations with central and local government authorities. It should also keep under review the relationship between the costs of general practice and the scale of fees, while bearing in mind that the British public still needs to be convinced that the architect offers the best value for money.

DAVID PERCIVAL

Architects earn less than members of the other learned professions mainly because they cannot imply, should their services not be used, that their clients are likely to die sooner or have their property misappropriated. If we could persuade people that buildings not designed by architects would fall down on them or let in the wet and the wind, we would be on the road to a higher income. Creative work cannot be properly valued—and the living designer (be he architect, sculptor or painter) has rarely been adequately paid. We can only sell our services at a higher price on sheer efficiency. The first step to improving our professional efficiency was hinted at in the report of the Oxford Conference on Education which regarded "post-graduate work as an essential part of architectural education" and went on to endorse a policy of developing post-graduate courses which will enlarge the range of specialized knowledge and will advance the standards of teaching and practice. It is particularly important that symposia and information services should be spread to the provinces and not confined to London. I also favour discreet forms of collective advertising. I want to see the appointment of a local authority architect as a statutory duty and I want him to administer the building regulations which are to supersede local byelaws. I also want to see every plan for a building submitted for approval under the Town Planning Acts signed by a Chartered Architect.

The raising of the standard of entry into the profession and the greater emphasis on full-time courses are commendable. The better relationship of practice and the academic course, and the proper relationship of the training of the architect and the training of other specialists connected with building are problems we must really try to solve. I am extremely worried about the proposal to establish a second tier of technical assistants. Once this is done it will set a pattern for a long time ahead. It seems to me that the semi-skilled assistant is not the right support for the architect if he is to provide the best professional service. Before committing ourselves on this issue we ought to know more about the various methods of office examination now in use and make an assessment of how the profession can most efficiently operate in the future.

The associated problems of raising standards and raising rewards can only be solved with a two-tier profession. An improvement in the quality of architectural services would solve most of the problems of relations with the building industry.

I have taken it that this question is concerned with the problems of job management. In this our efficiency is judged by our ability to produce the finished job at the date promised to the client and our ability to keep the cost to the amount we estimated. The immediate steps we should take are to see that we are making the best use of management aids, such as office progress charts, procedure check lists, questionnaires, etc., and that the management facts of jobs are properly documented to provide reliable information for the future. In addition the use of cost analysis and cost planning techniques provide the architect and quantity surveyor with a reasonable degree of control at all stages of the job.

Our contribution of architectural quality and good building technique must be supported by efficient management.

It is impossible to give a general answer to this question, the nearest approach would be to say "try harder."

I am in favour of fewer and better schools of architecture and with the integration of architectural education with that of the building technician and manager. I edited an ABT report which advocated this in 1945. I regard the two-tier profession as inevitable. I would not like to see genuine ability thwarted and we must ensure that adequate financial support is available for students selected for architectural studies on the basis of higher general education.

Pick up the drawing boards and sweep underneath. After emptying the wastepaper basket resolve to do something about collecting information that will make cost control a reality in every job.

Associates' Replies (continued)

WHAT IS YOUR REACTION TO THE PILKINGTON REPORT AND WHAT ACTION SHOULD THE RIBA TAKE NOW?

EWART REDFERN

The RIBA reaction to the Report showing the low status of remuneration should be to take steps to ensure that the architects and future architects are more efficient and not to try and create an all-in service. Architects, engineers, surveyors and consultants should all keep their own names and identities and get into the habit of co-operating together efficiently. The RIBA should be able to censure inefficient members.

GRAEME SHANKLAND

Since the AGM of 1955 the RIBA, under the pressure of the membership and of events, has been transformed. New tasks have been set, staff appointed and committees reorganized to cover more effectively most aspects of the architect's job today. With one exception, physical planning. This remains only the part-time task of the "Design and Planning Committee."

Last year Professor Matthew called for "a tremendous impulse to be given to planned reconstruction on a heroic scale in the next few years," and a "revolution in town planning" to achieve it. The RIBA should give this national lead towards positive planning. We should start by examining and defining the most important tasks of planning and reconstruction and urge on central and local government and private enterprise the best means of carrying these out.

The RIBA needs a new full-time Planning Committee charged with the task of preparing the Institute's brief to forward these ends.

One reason for our low professional economic (Pilkington) rating is that we are not considered as essential participants in basic physical planning decisions, but as "exterior decorators" of marginal utility."

L. G. VINCENT

The findings in the Pilkington Report are startling, but perhaps not entirely unsuspected. The sooner the public get to know the architect has a necessary and vital role in shaping their environment, the better. Here the RIBA Public Relations Committee can help. Although they have done excellent work since the war, this report is a challenge to further effort. The scale of professional charges and payment to assistants wants looking into and revising, to bring it in line with other professions doing no more, and perhaps less, onerous work. If one does work too cheaply, then one is put into a cheap category.

In order that an architect should fulfil properly his role in modern society, his education should be to university entrance standard before training for the profession. There are various ways of achieving this. There is a need for a two-tier profession. The present system trains and turns out too many architects, who all aspire to be future Corbusiers, but have not the ability. Many would, however, make excellent technical assistants, but it is necessary that their training should be geared to this end. The first-class architect or designee must be leader and co-ordinator of the building team. It is also necessary for the architect to be brought more into contact with the business side of his profession and the building industry. A year in a building contractor's office, and on site, would be of immeasurable value.

There is too much waste of time and materials in architects' offices in the production of working drawings, contract documents, etc. Far too many drawings are turned out (particularly in public offices). These can be cut down to an adequate minimum by pre-planning the contract documents, which should be brief and concisely turned out. More time is then left for design. The office should be organized on the group system, and contract administration should follow a routine. Even in the smallest firm these methods would work.

WHAT ARE YOUR VIEWS ON THE EDUCATION OF ARCHITECTS (WITH PARTICULAR REFERENCE TO THE TWO-TIER PROFESSION) AND THE BUILDING INDUSTRY?

A two-tier system of the type now being considered could be disastrous and result in most of the work being taken over by the "pin-money" architect or technician.

Architectural education should be drastically reviewed to get back to the principle that it is the consumer (the practising architect) that matters. Technical perfection and the know-how arising from practical experience should be mastered before the student is allowed to let his hair grow and develop his "art."

On education, the Oxford Conference recommendations mark an important step forward. Moves to raise architectural education to university level are right, not only for the profession but for the new concept of the university. The need for post-graduate "operational research," including urban design, is urgent.

WHAT IMMEDIATE STEPS SHOULD ALL ARCHITECTS' OFFICES TAKE TO IMPROVE EFFICIENCY?

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Licentiates' Replies

ROGER T. WALTERS

The Pilkington Report compare the incomes of the professions. We have come out badly. But we still do not know how much society ought to pay its architects. We lack the relevant facts. The place to start is with the rewards of *building*. What is the combined income of the building team? Is it fairly divided between the members of the team according to function? What *are* these functions? We have made a useful start on the study of the structure of the profession. I think we should extend this work into a wider field. I would like to see the RIBA strengthen its Economic Research Department; set up the Building Industry Committee, already projected; join forces with others in a serious study of the structure of the building industry.

BERNARD COX

The Pilkington Report confirms the belief that the status of the architect is not what it ought to be, and points to the conclusion that to raise it must be the major objective of the RIBA. Such an aim cannot be dissociated from the advancement of architecture itself in the widest sense. It can only be achieved by a long-term effort under the two main headings of (1) increased efficiency of the profession, and (2) improved public relations.

ALFRED GEORGE

The problems of a technical category of staff for Architects' Offices is obviously one which must be dealt with forthwith: experience has shown that this type of technician who is mainly concerned with the "production" side of buildings as against the Architect/Designer, is not only invaluable in offices but is indispensable. The appropriate recommendations of the Oxford Conference should therefore be implemented as soon as possible, and the proposed organization should be set up giving such assistants a professional status.

I am totally opposed to any reduction of the professional status of the architect. I think that we must first of all safeguard the position of the architect as a creative designer and then set up the joint organizations to provide an "all-in" service. This can only be done, in my opinion, by making it illegal for any person to erect any building which was not under the control of a registered architect, working in an independent capacity. The ideal organization could be similar to that set up by the Greek, Doxiades, where the architect is the director of a joint team of consultants, acting as an independent organization.

I believe that we all feel very strongly on the question of fees, and that all architects, whether in private or public offices, are agreed that the present scales and systems of payment are too flexible and subject to variation. I believe that the existing scales should be increased to bring fees and salaries throughout in line with other professions. The Royal Institute of British Architects should immediately set up a revised code which would also cover salaries of architects not only in private practice but also in Local Authority and public employ.

Apart from payment to architects as mentioned above, I consider it most important that the Royal Institute of British Architects should set up a standard code of minimum salaries for architectural staff that would apply throughout the country, both in private and public offices.

On education. To arrive at a clear policy we must first agree on the kind of future for which our students are being trained. Are we going to allow architects to be directors of building and component firms? (I think we should, under an alternative code of conduct.) Are we moving towards more integrated organizations? (I think we are—there is a place for the all-in service if architects help to control it.) Are we going to have a two-tier profession? (I hope so, but with the second tier *above* the present one, not below it.) While these questions are being resolved the schools should be given more freedom to experiment, say, for a five-year period. I would like to see more than one college of joint education started during this time.

The most direct way to improve efficiency is to pre-plan office time according to the money available for salaries. If it has not already been done, introduce cost planning. If it is a public office, set up a development group.

Despite a real regret that the profession cannot retain a loophole for the late developer or erratic genius, I support the recommendations of the Oxford Conference as being inevitable in the changed conditions of modern practice. The two-tier profession is already in being, and we ought not to ignore the present wide disparity in the size and organization of practices, and in local conditions; but the ideal to be aimed at is the all-architect team which should be encouraged wherever practicable. I am in favour of every step consistent with professional integrity which will bring architects more closely in touch with the building industry.

Architects should ensure that, so far as it is within their power, the client gets his building on time and value for money; this means pre-planning and cost planning.

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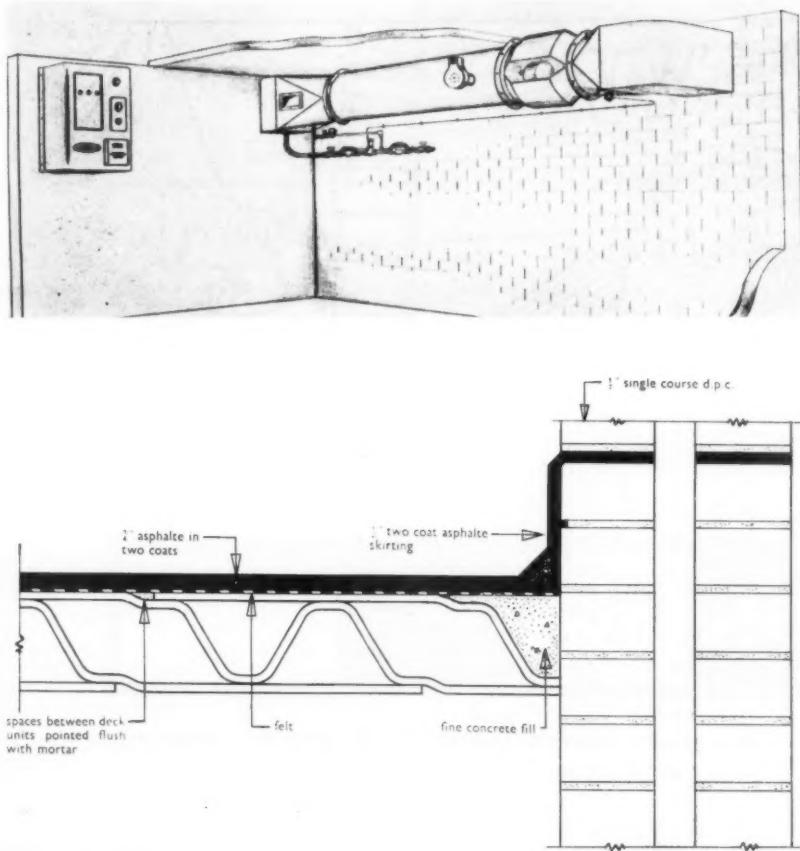
This week Brian Grant describes steel flooring, an air heater unit, and a pamphlet on laying asphalt over asbestos decking.



Left, top to bottom: Owen steel flags; the Griffiths air heater; asphalt finishes on asbestos decking.

Steel flooring

The illustration on the left shows a factory floor laid with Owen steel flags, which are made from 10 g. sheet and are 18 in. by 12 in. Dovetail shaped tangs stamped in the sheet keep the flags firmly embedded in the concrete base and provide a rigid hard-wearing surface. (Rubery Owen & Co. Ltd., Industrial Storage Equipment Division, Whitegate Factory, Wrexham.)



Heated air for process work

The diagram on the left shows a typical installation arrangement for the Griffiths air heater unit, which is designed to supply heated air for applications where the products of combustion can be circulated with the air supply, such as low temperature ovens, drying rooms, curing chambers and other applications where a temperature of not more than 300 deg. F. is required. Each unit incorporates a secondary connection for return air to be recirculated and the air temperature is controlled by thermostat. Air circulation is by an axial flow fan with automatic valves to cut off the gas if the current supply should fail. Four models are produced with air outputs up to 4,500 cu. ft. min. (A. E. Griffiths (Smethwick) Ltd., Booth St., Birmingham, 21.)

Asphalt on asbestos decking

A recent leaflet from the NAMMC (Information sheet No. 4/60) suggests details for the laying of mastic asphalt on asbestos decking laid to falls of not more than 10 deg. The diagram shows a parapet wall finish. Sheathing felt is recommended over the decking, and a suitable board or screed can be laid immediately under the sheathing if additional insulation is required. (Natural Asphalte Mine-Owners & Manufacturers Council, 14, Howick Place, Victoria Street, London, S.W.1.)



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17 CONSTRUCTION: GENERAL

light cladding, 8: materials and finishes, timber and glass

Last week R. Michael Rostron considered the first cost, appearance and performance of metals used in curtain walling.* This week he does the same for timber and glass.

Timber

Timber possesses an impressive list of advantages for both framing and panels and one very serious disadvantage. The disadvantage is the great dearth of suitably durable finishes, but very often the other attractive qualities of timber will outweigh this drawback. Timber, like concrete, is one of the few non-metallic materials which can be used equally well for framing and panels. There is, therefore, no danger of corrosion and, with good detailing and correct choice of timber, the possibility of rot is virtually non-existent. Its cost can be as low as half that of steel and it is easier to shape and mould than almost any other material. In addition, its thermal transmittance is extremely low in comparison with metals and its capacity to absorb and evaporate moisture reduces the possibility of moisture penetration. The greater freedom which timber offers to the architect is accompanied by a greater responsibility for careful design and detailing: improperly used timber can be both dangerous and costly. Bulkier sections, necessitated by a lower flexural stress than metals, tend to give a heavier visual effect. This can often be used to advantage, or it may be reduced by careful profiling and the use of metal or frameless opening windows.

Because moisture movement of timber is greater than other materials and because it is capable of absorbing a fair amount of moisture, one of the most important

design considerations is to make allowance for this movement. If the architect does not make it, Nature will provide it for him. Dimensional changes were discussed in article 2 of this series in which was printed a Table (AJ, March 3, 1960, page 365) which gave comparative moisture movement of various timbers. Moisture movement may be accommodated by edge clearance between panels and framing, by the use of traditional jointing techniques, such as tongued and grooved and comb joints, by lamination, as in plywood and block-board, and by a limitation on the size of members, particularly width, by the use of weatherboarding and panels of tongued and grooved strip. In boarded panels the use of single V-jointing is not likely to be as efficient as a double V-joint, this is illustrated in Fig. 1. When the butts of the single V-joint come together because of abnormal expansion, the tendency is for the panel to buckle and the boards to lift off the battens (A). This tendency is eliminated if double V-joints are used (B). Abnormal expansion will cause slight crushing of the feather edges, but no buckling. In addition the internal V-joint allows penetrating water or condensation to run off the horizontal battens instead of collecting on their top surface. For this reason their top surfaces should be chamfered and cavities drained. All types of V-joint require care in handling to avoid damage to the feather edges of the joint.

To prevent water penetration particular attention must be given at both permanent and openable joints to the value of weatherings and the breaking of capillary paths. Boarded panels should be backed with a waterproof sheathing felt or paper which is able to breathe so that it does not trap condensation within the wall. For this purpose most British building and Kraft papers possess the curious quality of being waterproof and at the same time permeable to quite low vapour pressures and are satisfactory for external sheathing.

* Previous articles in the series were as follows: Heat Transmission, February 25, 1960; Stability, March 3; Condensation, March 10; Fire Resistance, March 17; Sound Insulation, March 31; The Joint, April 28; Materials and Finishes, Metals, May 5.

loose



tight



very tight



A SINGLE V-JOINT



B DOUBLE V-JOINT

Fig. 1. Result of movement in edge-restrained boarded panels.



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technical section

The wide range of hardwoods and softwoods suitable for cladding is listed in Table 1, prepared by Ezra Levin, Chief Architect to T.D.A. All timber must be seasoned to conform to conditions of service and in most cases a moisture content of 15-18 per cent will be suitable. Unlike other framing materials, timber is capable of site adjustment to take up dimensional variations. This advantage is partly offset by the problem of forming long continuous mullions since, although 20-24 ft. lengths may be obtained in many species, 10-14 ft. is a more usual average length. The difficulty is overcome by the use of lamination techniques and one British manufacturer markets a standard laminated framing system.

Among the softwoods western red cedar, and among the hardwoods afrormosia, idigbo, iroko, makore, African mahogany, meranti, opepe, sapele and teak in particular are naturally resistant to decay and may be used without protection provided the weathered colour of silver grey is acceptable. The resistance to decay of many of the remainder can be improved by impregnation with a chemical preservative, which adds about 10 per cent to the cost. Brush application is cheaper but it cannot be considered permanent. Vertical boarding is most vulnerable to rot in the end grain of its lower edges and water should preferably be allowed to drain freely from these edges. If they are enclosed in grooves or covered by beams preservative treatment or lead sealing is essential.

Secret nailing or lost head nailing will prevent corrosion staining of unpainted timber, or alternatively composition nails may be used. Hammering may break the coating of galvanized or sheredized nails and zinc is corrosive to western red cedar and oak. Copper nails can be used but there is a risk of staining.

Although naturally durable timbers need no protection, weathering will eventually bleach out all colour and all species will eventually turn silver grey, differing only slightly from the familiar matt grey colour of weathered cedar. This bleaching is due primarily to the action of ultra-violet light and, provided it is kept clean, can be very attractive. In urban atmospheres, it will rapidly become dirty if unwashed by rain and the use of unprotected timbers in cities requires careful thought and attention to detail if they are not to become dull and drab.

The most economical and effective protection to all timbers is afforded by gloss paint. If paint is decided upon, additional economies may be effected by the use of the cheaper softwoods, but, as J. C. Eastwick-Field has shown* the initial cost of softwood windows primed and painted with two undercoats and one finishing coat is greater than the cost of the same window in either oiled agba or oiled African mahogany. Even with five-yearly painting of softwood windows, untreated hardwood windows are cheaper over a 20-year period. Unprotected hardwood is thus an attractive proposition in suitable atmospheres.

In urban atmospheres, and where the silver grey weathered colour is unacceptable, hardwood may be treated with one of the clear finishes: oil, sealer or varnish. The purpose of the clear finishes is to reduce weathering and to retain the natural colour of the timber, but it must be admitted that clear finishes are less than half as resistant to weathering as paint, because they do not stop the harmful ultra-violet light as opaque paints do. A good gloss paint can be expected to last five or six years, but under the most favourable conditions and using the best available materials, varnish cannot be expected to last more than three

* 1957 British Architects' Conference Papers: "Finance, Design and Durability of Buildings," RIBA Journal, Vol. 64, p. 372.

TABLE 1—Characteristics of some timbers suitable for cladding (prepared by Ezra Levin, A.R.I.B.A., of the Timber Development Association)

Common name	Colour and grain texture *	Working qualities †	Ease of finishing ‡	Natural durability §	Moisture movement	Relative availability ¶	Relative price range **
<i>Hardwoods</i>							
Afrormosia	B f m-g	rc	+	s	fg	m-h	
Afzelia	R c m	rc	+	s	fg-s	m	
Agba	Y f-m g	e-fe	+	s	fg	l	
Idigbo	Y m-c m-g	fe	+	s	fg	l	
Iroko	B m-c m	fe	+	s	g	m	
Jarrah	R e m-d	fe	+	m	g	l	
Karri	R c m-d	rc	O	—	g	l	
Keruing/Gurjun and Yang	R c m	rc	O	l	vg	l	
Mahogany, African	R m g	e	O	s	g	m	
Makore	R f d	e	+	s	s	l	
Meranti, Red	R m-c g	fe	O	m	fg-s	l	
Niamon	R m-c g	rc	O	m	s	l	
Oak, European	YB c m	fe	+	m	fg	m-h	
Opepe	OB m m	fe	+	s	vg	l	
Sapele, Utile	R m g	e	O	m	g	l-m	
Seraya White	YB m-c g	fe	O	m	g	l	
Teak	B m m	rc	+	s	fg	h	
<i>Softwoods</i>							
Cedar, Western red	RB m g	fe	+	s	fg	m	
Douglas fir	RY m g	fe	O	m	g	m	
Hemlock, Western	PB m g	fe	—	m	g	l-m	
Pine, pitch	YB m-c m	rc	+	m	fg-s	m-h	
Redwood, European	YR m g	fe	—	m	g	l	
Whitewood, European	W m g	fe	—	m	g	l-m	

* Colour: B—brownish PB—pale brown R—reddish RB—reddish-brown RY—reddish-yellow
Y—yellowish YB—yellowish-brown YR—yellowish-red OB—orange-brown W—whitish

† Texture: f—fine grain m—medium grain c—coarse grain

‡ Ease of machining, nailing and gluing: g—good m—medium d—difficult

§ Extent of preparation and care required before applying surface finish: e—easy fe—fairly easy
rc—requires care

|| Natural durability: + durable O moderately durable — non-durable (i.e. requires protection)

¶ Moisture movement: s—small m—medium l—large

** Approximate general availability: g—good supply fg—fairly good supply s—short supply

** Rough indication only: m—medium price range (hardwood 25-35s. per cu. ft., softwood £110-£130 per std.)
h—high; l—low.

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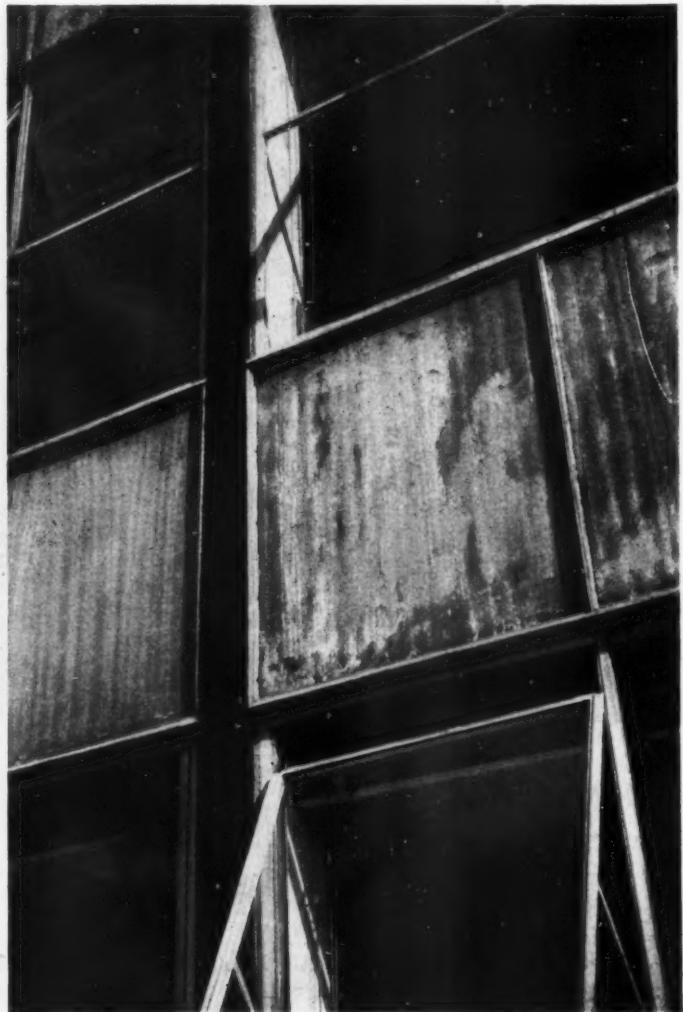
years. Two years is a more accurate average figure, and a life of only one year can be given to varnish in areas fully exposed to wind, rain and sun. The life of oil finishes is even less and in poor conditions oiling will be necessary every six months if it is to be of use in maintaining the appearance of the timber. Whilst adding lustre, oil rapidly collects dirt and if too thickly applied is most unpleasant.

In a very informative paper delivered at the RIBA Symposium on the Constructional Uses of Timber*, A. C. Oliver of T.D.A. summarized the properties of the various clear finishes and gave some interim results of the T.D.A. weathering tests. It was found that, whilst varnish gave added lustre to all hardwoods, western red cedar, red meranti and sapele maintained the finish better than other hardwoods, as did western red cedar among the softwoods. The best resistance was given by phenolformaldehyde resin-based varnishes which under average conditions will last two to three years. Medium oil alkyd varnishes behaved rather less well and other types broke down after only 12 months.

When renewal of the finish is necessary it must not be

* A. C. Oliver, "External Clear Finishes for Timber," RIBA Journal, Vol. 64, p. 329 (June 1957).

Fig. 2. Deterioration of finish to plywood.



delayed, as areas where the surface has broken down will begin to turn grey. If weathering is not severe, colour may be regained by rubbing with steel wool and weak oxalic acid, but otherwise sanding will be necessary before revarnishing.

It is likely that the regular application of clear finishes to both hardwood and softwood will be an expensive business and it can only be recommended if this is fully understood. If, for any reason, unprotected wood is undesirable, a more economical treatment is the application of one of the various plant stains or, preferably, a creosote stain. They stain and preserve the timber, prevent the colour changes associated with weathering whilst allowing the grain to show through, and do not need frequent maintenance. They are, surprisingly, little used in this country although the use of "Fal Red" stain in Scandinavia and the widespread use of stained hardwood in Canada suggests that here may be a very rewarding timber finish. The author has had experience with a dark blue paint stain on western red cedar, with very successful results.

A timber finish which is still very experimental is sprayed plastic coating. This coating, in opaque, coloured and transparent forms, is sprayed onto finished joinery (which must have a very low moisture content) to form a tough, elastic and continuous protective film. If teething troubles can be overcome, it promises to have a great future.

Plywood and blockboard used externally should be resin bonded with a WBP* type adhesive. This will prevent delamination due to dampness or exposure to weather, but the wood is still liable to fungal attack. Fungal attack may be prevented by using plywood constructed throughout with a species known to be durable, by protecting the face, edges and back of the timber, or by treating it with a suitable preservative. Douglas fir, African mahogany, makore, sapele, seraya and utile plywoods are all resistant to decay and, with the exception of Douglas fir and seraya, are easy to paint. Gaboon plywood is easy to paint but not resistant to decay and Douglas fir plywood, although extensively used externally, is not one of the easiest to paint.

Resin bonded plywood may be pressure impregnated with certain preservatives. Normally, protection is confined to the outer plies and edges of the board, but, provided the board is not cut after treatment to expose untreated wood, adequate protection will be given. A more thorough method, which gives complete protection against fungal and insect attack and which allows the board to be cut after treatment, is to treat the veneers before assembly. Plywood treated in this way is commercially available, but will only be required under very severe conditions.

Plywood may be oiled or varnished, but the same limitations as for hardwoods apply. If regular maintenance is acceptable and unpainted plywood is used, any mastic which comes into contact with it must be of the non-oiling type to prevent creeping and staining. Alternatively, an impervious tape, such as polythene, should be fixed to the edges of the board.

* BS 1204. WBP: weather and boil-proof.

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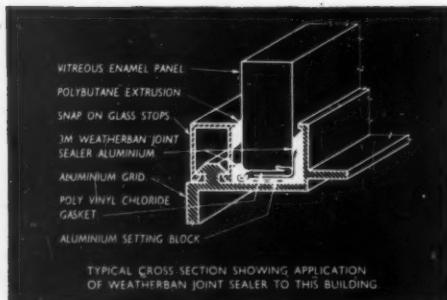
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technical section

It is possible that the best finish for plywood at the present time is paint. Surface application alone is not sufficient to withstand continuous exposure; the face should be lead primed and finished with two coat work, the edges sealed with paint or lead paste, and the back, even though not directly exposed to weather, should be treated with red or white lead if dampness is possible. One of the greatest limitations to the more widespread use of timber cladding is its low fire resistance and the restrictions of fire legislation. Its fire resistance can be increased by impregnation with water-borne salts, such as monammonium phosphate, zinc chloride, or boric acid, but these treatments require a protective surface coating. Fire retardant paints may be used and plywood can be laminated with asbestos sheets, but in most cases timber cladding on multi-storey buildings requires bye-law waivers or the incorporation of horizontal and vertical firebreaks between floors.

Glass

Because glass is weather and corrosion resistant, incombustible, comparatively cheap, and can be obtained textured, coloured, opaque, translucent and transparent, it is not surprising that it is by far the most popular panel material. Of buildings examined 37 per cent used glass as a panel material, in plain and textured forms over a coloured backing, integrally coloured, or coloured by a stoved-on coating.

In many ways, glass is not an easy material to use correctly. In particular it exhibits a most complex thermal behaviour. In the transmission of heat in all its forms and in fixing it requires a very complete understanding of its properties and performance. Since particular attention has been given to these and other points in earlier articles, only general information on choice and fixing will be considered here.

Most of the failures of glass as a cladding material have been breakages or the result of breakages. No one needs reminding that glass is a brittle material and that care is required in handling. Nicks and flaws along the

edges are always possible causes of ultimate breakage, particularly if edge cover is too great. In addition, the natural fragility and thermal movement of glass (particularly dark coloured glass) require adequate support and clearances. If attention is given to these factors, breakages should be rare.

There are few limitations on the choice of glass for cladding. Coloured wired glass should never be used because it is impossible to produce smooth edges and thermal breakage is therefore likely. Some of the finely textured rolled glasses retain dirt and are difficult to clean in dirty atmospheres.

When glass is used in front of a ventilated cavity, dirt and dust tend to settle on the cavity face of the glass. If this surface is not accessible for cleaning, one of the opaque or stove-enamelled glasses should be used. Alternatively, clear glass may be used, provided periodic cleaning is possible and the opaque backing on the internal side of the cavity is dark enough to mask deposited dirt.

The substantial difference in price between sheet and polished plate glass means that great economies can be made if the size of glazing is limited so that 32-oz. sheet may be used. For example, a 5 ft. \times 3 ft. sheet in 32 oz. would cost 20s. 11d.; in $\frac{1}{2}$ -in. polished plate, 90s. 3d., nearly four and a half times as much. The saving will result in some loss in quality. When viewed normally, the difference between sheet and plate glass is difficult to detect, but viewed obliquely (down a long corridor, for instance), sheet glass exhibits marked striations. These can be reduced by using SQ (selected quality) sheet, but this, of course, entails an increase in cost of about 15 per cent over OQ (ordinary quality) sheet.

Most architects are fully aware of the value of double glazing to reduce sound and heat transmission and condensation. Double frames will usually be required if the transmission of sound is to be reduced (see Article 5, AJ, March 31, 1960, pp. 523, 524), but otherwise either double glazing composed of two separate

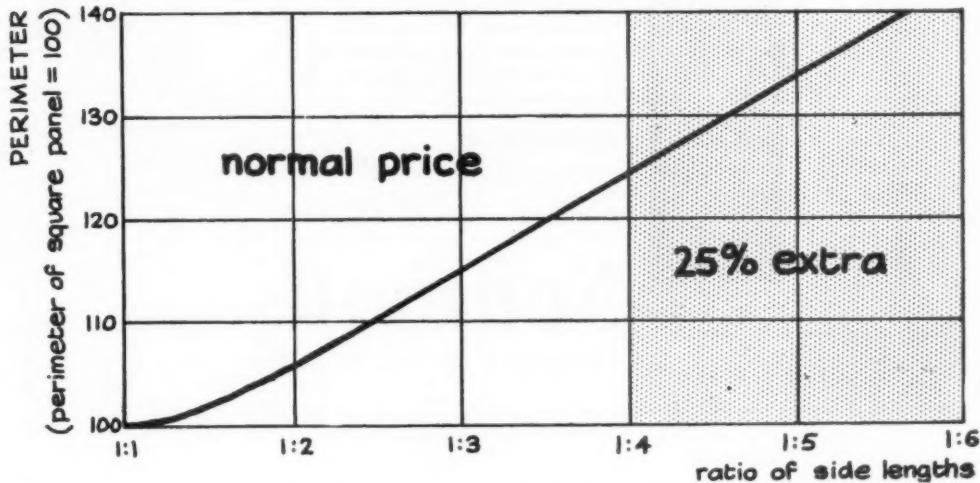


Fig. 3. Oblong panels: variation of perimeter length with shape.

Important wherever women's toilet facilities are provided

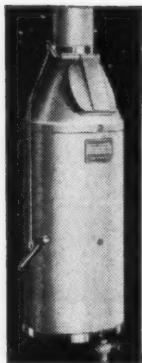
The simple and sensible method of supplying and disposing of sanitary towels . . . Southalls, Britain's largest and most experienced house in this market, introduce their guaranteed equipment.

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The case is finished in stoved white enamel and chromium with a trouble free dispenser mechanism. It takes pennies. Southalls attend to maintenance and the supply of towels — a countrywide service which is without equal. This machine is a time saver when dispensing the indispensable.

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32" high, 5½" wide, 4½" deep.
Price £10.10.0d (net carriage paid). Machines for soluble and other types of towels available.



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Southalls (BIRMINGHAM) LTD.

CHARFORD MILLS, BIRMINGHAM 8

ANOTHER  PRODUCT

technical section

sheets of glass in a single frame, or one of the factory-made twin (or triple) pane units will be satisfactory. When two separate sheets of glass are used, the cavity will not be airtight and changes in atmospheric pressure will allow entrance of water vapour and dirt. It is therefore necessary to have access to the cavity for periodic cleaning and this can be effected by using removable beads for one pane (usually the internal one) or by using two frames hinged together. Removable beads are reasonably airtight and cleaning will only be necessary every two to three years, but it is a fairly difficult operation if the panes are large. Hinged frames are less airtight and cleaning will be necessary at more frequent intervals, say every three to six months. The double frames also tend to be rather heavy in appearance, especially if the complete window is designed to be opened, but the cleaning operation is comparatively easy.

Double glazed factory-made units have increased in efficiency recently and are the most efficient method of double glazing. Costs of all types of double glazing are high: a 5 ft. \times 3 ft. sealed unit will cost 115s. 0d. in 32-oz. glass and 249s. 0d. in $\frac{1}{4}$ -in. plate, but the average cost of double glazing with factory-made units and with double windows is about the same, although in both there are large variations. The expensive item of a double glazed unit is the edge seal and for the most economical use the ratio of perimeter to area should be kept as low as possible. Thus a 1 ft. \times 1 ft. unit will have a perimeter/area ratio of 4, whilst in a 4 ft. \times 4 ft. unit the ratio will only be 1. The latter unit will therefore be cheaper per square foot. Fig. 4 shows the perimeter/area ratio for square units, together with corresponding prices per square foot. When oblong units are used, the shape will also have a bearing on perimeter and price. Thus a 4 ft. \times 4 ft. unit has a

perimeter of 16 ft., whilst a 2 ft. \times 8 ft. unit, although of the same area, has a perimeter of 20 ft. Fig. 3 gives perimeter factors (square units are given a factor of 100) of units of equal area but different shape. Normal prices are charged for units with sides in the ratio of 4 : 1 or less. Above this ratio, 25 per cent extra is charged. By a suitable choice of shape and size, these two figures show that the architect can obtain worthwhile savings when using double units.

As well as being the most expensive item, the edge seal is also the most vulnerable, and most failures of double glazing units are caused by failure of the edge seal. Experience has suggested that plastic spacers are more efficient in maintaining the seal than metal spacers but this may well be because the largest British manufacturer of double units uses metal spacers. The units using plastic spacers are also claimed to have a lower "U" value than those with metal spacers.

Although the efficiency of edge seals is now quite high, they are always likely to be potential danger spots, since glass/metal and even glass/plastic junctions are notoriously difficult to make and maintain. In this connection, the German technique, used by Messrs. Gado, of sealing the edges of double units with a glass-to-glass weld (Fig. 5) would seem to offer a more permanent solution.

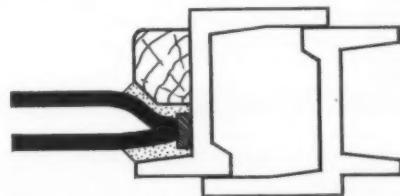


Fig. 5. Glass welded double glazing unit made in Germany by Messrs. Gado.

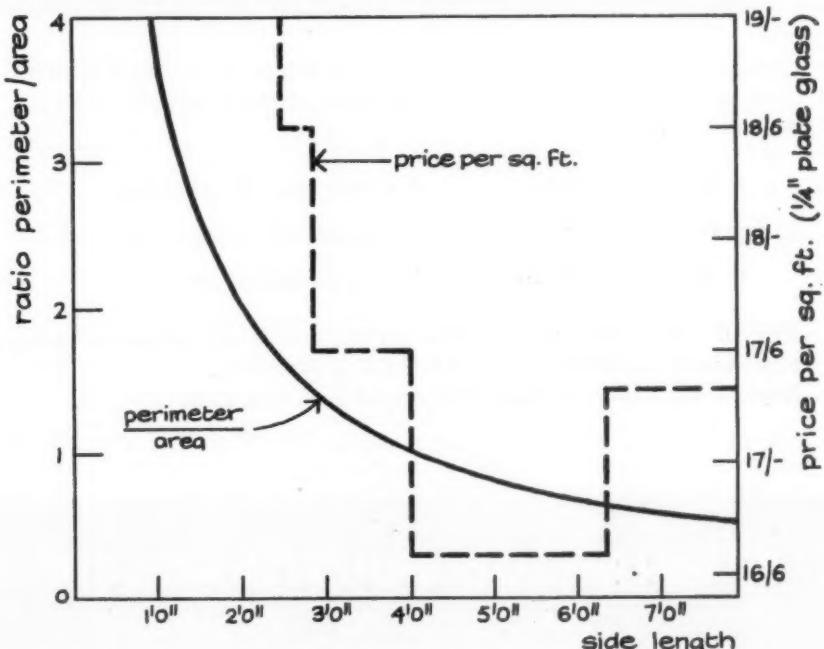


Fig. 4. Perimeter/area ratio and price per sq. ft. for square double glazed units.



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COMPETITION FOR HOUSING AT HALESOWEN

On May 16 the result of a competition for the layout and design of a new housing estate, comprising 250 dwellings, at Highfields Park, Halesowen, was officially announced. The assessor, Eric Lyons, awarded first premium of £1,000 to Mary E. L. Granelli, Miali Rhys-Davies, and Remo Granelli, second premium of £500 to Andrew Radwan, J. Warren Chalk, and Ronald Herron, and third premium of £200 to Michael J. Smith and Jeremy A. T. Goer. In addition three schemes were commended by Mr. Lyons and the authors of each receive £100. They are Edward H. Harry and Roman Halter, David Dry and Katharina Halasz, and J. Bruges, F. R. Baden Powell, and Robert Bridges. The competition, which was open to architects registered in this country, drew 43 entries.

The name "Halesowen" probably does not mean much to most people. If it does, the picture called to mind will be of a small town about seven miles west of Birmingham where the majority of people are more interested in making steel or motor-cars, or, in years gone by, nails, than they are in architecture. But the Borough Council has shown that it is interested in architecture (an attribute not common amongst borough councils) and concerned to get good results in new housing development by holding a competition and appointing Eric Lyons as sole assessor. The conditions of the competition called for a scheme incorporating 250 new dwellings varying in type from four- to two-room accommodation. Halesowen has a population of 43,480 and is a town of some architectural character surrounded by an attractive countryside. Whilst the shopping and commercial centre is as near to ribbon development as makes no difference this fact is not obvious owing to the hilly topography. The site of the new housing estate, the subject of the competition, is just north-west of the town centre, and has a consistent fall of 1 in 10 from west to east. The site is overlooked on the west by pleasant parkland and the conditions of the competition provided that pedestrian access to this park be made possible from the site by closing the existing road (Hales Road) which forms the western boundary of the site. To the north is a rather charming cemetery which straggles down the hill and to the east some new housing development, the work of a local architect. Oddly enough some competitors were at pains to site their buildings so that windows did not overlook the cemetery, a precaution they did not consider necessary with the development to the east.

No specific cost limitations were written into the conditions though the factor of higher costs was used as an argument to discourage high building. In fact there is a local prejudice towards flats in high blocks and several competitors allowed themselves to be so influenced as to include no buildings higher than four storeys (the limit of "walk-up" blocks suggested in the conditions). Significantly the award winners were undaunted by this suggestion. The authors of the first premiated design estimate their scheme to cost £586,002 plus an extra of £7,200 for washing-down bays to garages, inspection pits, cleaning bays and stores, sculpture and play equipment. In fact the assessor has disregarded, for the purposes of the competition, the provisions for supervisor's flat, moped stores and the extras quoted and this brings the estimate down to £569,809. This is well below the average of estimates by competitors.

In his report Eric Lyons stated that the premiated designs had been selected on the basis of their competence in design and economy and for their adventurous spirit. Extracts from his report, which was regrettably brief, appear below.

Mr. Lyons has some general criticisms to make and the following is quoted from his report:

Too many competitors have failed to think about the users of the dwellings and have produced errors of planning such as: kitchens and living/dining rooms separated by long corridors between extreme ends of flats; bedrooms to flats facing on to access balconies; bedrooms having access to bathroom only across living room (this may be just tolerable in 1-bed dwellings). Some

competitors have been dazzled by the possibilities of "mezzanine planning" for this sloping site and produced over-ingenuous split-level sections regardless of costs. On the layouts, the principal failures were: lack of unity of concept; inadequate solutions for service access to buildings, and car-parking and pedestrian access; no indication of intentions for landscaping, garages and stores inconveniently sited or untidy. Some competitors were only able to solve the access problem by excessive roadworks which frag-

mented the site and surrounded the buildings with tarmac and concrete. Some competitors' reports were reticent about their basic ideas, and even information about external materials and colour was not given, although elaborate details might be mentioned on routine matters. In a competition where dwelling and room sizes are obviously important, the assessment was not made easier by the failure of some competitors to indicate these areas.

Halesowen Competition: FIRST PREMIATED DESIGN BY

Of their own design the winners say: "The design advocates a philosophy of life associated in most minds with suburban living and we have attempted to capture its qualities of universal appeal without prejudice to the urban scene. In this context the recognition of the individual is paramount, and we advocate groups or units of family scale in easy association with their foregrounds, suggesting responsibilities for both land and structure."

Thus the authors justify their break from the traditional approach (certainly traditional to postwar work) whereby buildings are concentrated in groups in order to extract as much open space from the site as possible. They have deliberately sprinkled buildings more or less evenly over the whole site and achieved a near brilliant solution which so easily might have been failure.

Their report continues: "The site is patterned with hedges and walled enclosures from which trees and buildings rise protectively where children can play in safety and their elders relax. These garden squares are semi-public and half urban and the main town footpaths link them to each other and the freely landscaped park on the crest of the site. The sense of enclosure is sometimes heightened by linking some of the blocks with covered balcony extensions.

"The elements of the landscape are intentionally artificial, subordinate but sympathetic to the architecture and as an extension of this form of the development over the rural scene.

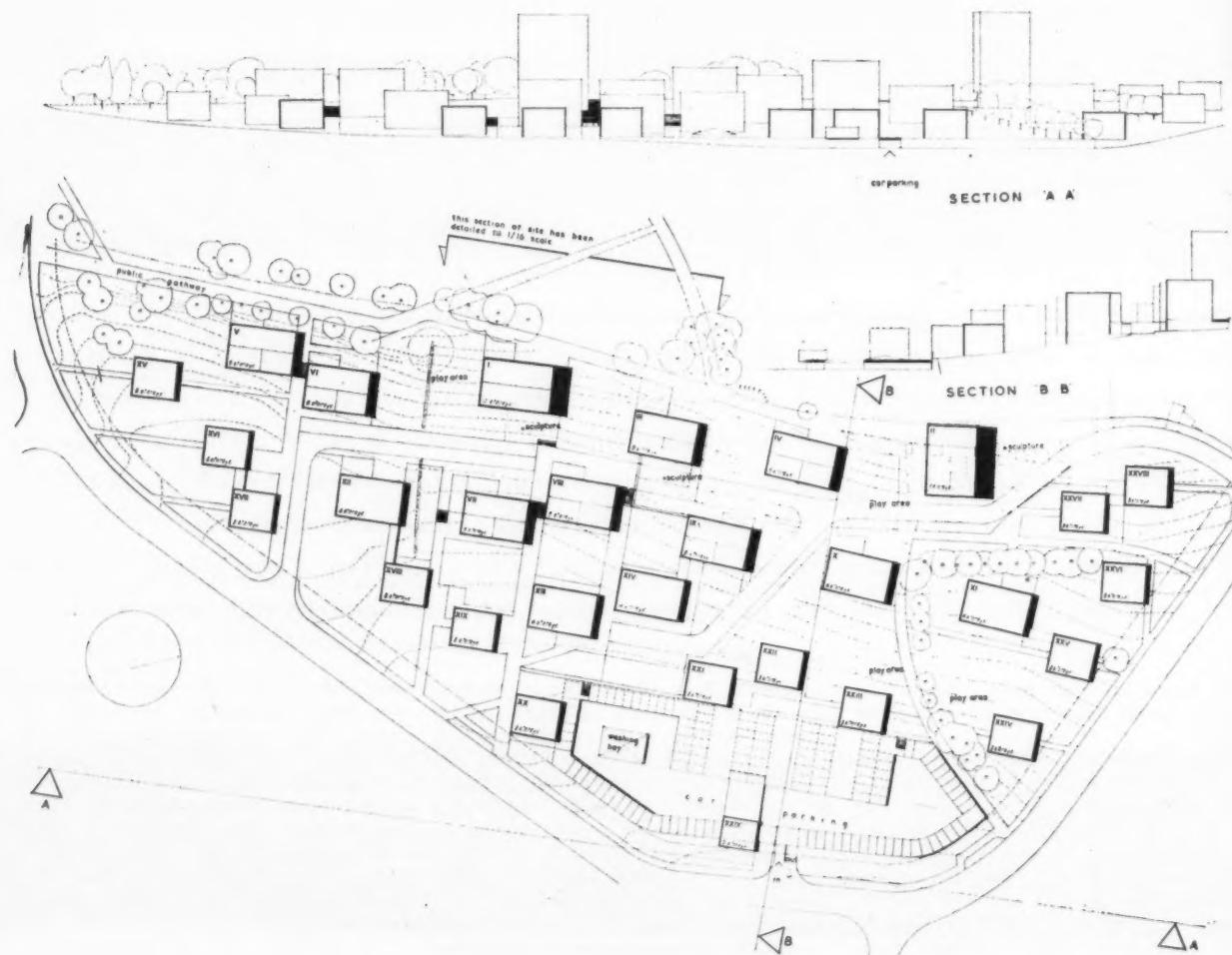
"It is proposed that the garages are centralized and compact with space for maintenance, cleaning and storage, whilst casual angled parking would be permitted on the service roads. A plea is made for a supervisor's flat to the garage area where stocks and equipment could be sold or exchanged and which could, by extension, be made financially attractive to the authority." These extracts from the competitors' report outline the ideas upon which the design was based. The following extract from the assessor's report best describes the design itself:

"The winning design is based upon a simple idea and has been presented with great clarity. The accommodation is provided in a series of 3-, 4-, 5- and 10-storey 'point' blocks. These elegant rectangular blocks are distributed over the site with engaging informality. The placing of the buildings has obviously been carefully studied, and I am impressed by the subtlety with which the scheme has been created. Broad footpaths descend between the buildings and between the walled or hedged garden squares. Exter-

nally, the buildings are delicately handled and modelled with great sensitivity. The integration of the landscape and buildings has been achieved on an urban scale, and the whole complex should produce a most satisfying living environment.

"The organisation of the site has been made possible by the skilful planning of the actual blocks. The 3-storey blocks have a central staircase serving three maisonettes on the upper floors, with flats on the ground floor. The 4-storey blocks have a similar staircase serving four super-imposed maisonettes, with a flat to fill up over the entrance and stores. The 5-storey blocks are similar but with lower ground floor of flats on one half of the block. The 10-storey blocks have four flats per floor served by twin stairs and lift, and stores are situated in lower ground floor. The avoidance of out-buildings, by placing all stores within the buildings was an important decision, as can be seen from the uncluttered layout. Another significant point is the placing of all living rooms on the corners of the blocks so that their windows are adjustable to the aspect, and to avoid overlooking nearby blocks.

"There are some criticisms to be made. The siting of block two on the boundary may not be acceptable but there is ample room to move it. I am not convinced about the



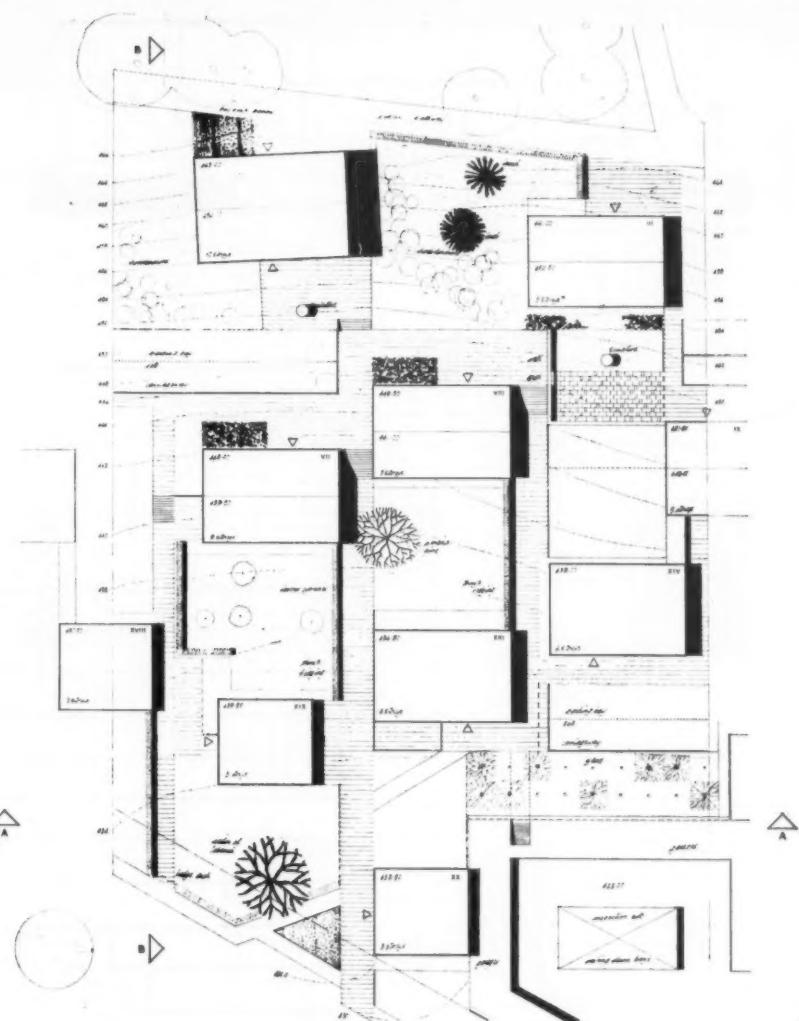
Left,
Right,
through

MARY E. L. GRANELLI, M. RHYS-DAVIES, AND R. GRANELLI

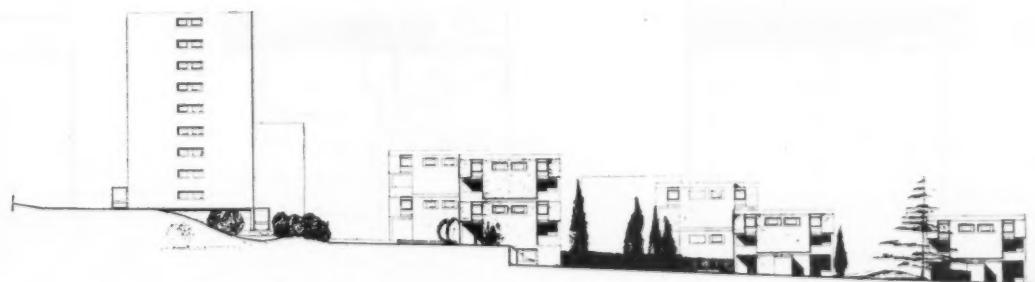
competitors' plea for a supervisor's flat connected with the entrance to the garages; indeed I suggest that the idea of a single access off the 'square' be re-examined with a view to providing two accesses, one at each end of the garage enclosure. One minor point is that the car-parking strips should be stopped before the ends of the cul-de-sac roads to ensure adequate turning spaces. For no reason that I can see, in the F.3 type flats, the partition between the bedrooms has been placed to give equal-sized bedrooms of 125 sq. ft.; the adjustment can easily be made to conform to the Ministry standards. A similar adjustment can be made in the position of the partition between kitchen and living room, in the same flat. All these points are but slight blemishes on this overwhelmingly satisfactory scheme; they can be removed in the normal course of detailed study and development, without affecting the character of the layout or of the buildings." The tower blocks (I and II) are of reinforced concrete frame construction with plate floors, lightweight block infill and coursed white faience, matt finish cladding to gables and spandrels. Remaining blocks are all load bearing cavity brick construction with facing brick externally.

Left, site plan and section.

Right, detail of portion of site plan and sections through it.

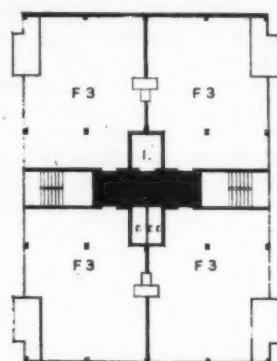
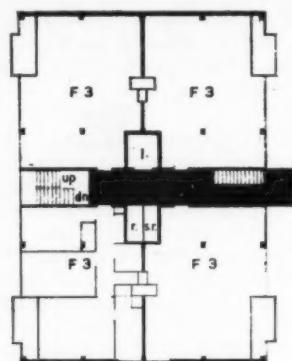
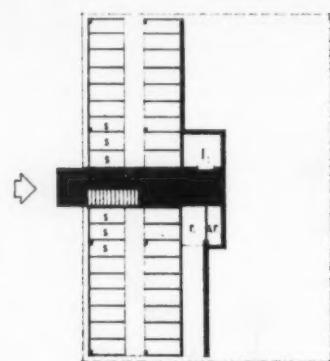


Section A-A.



Section B-B.

Halesowen Competition: FIRST PREMIATED DESIGN BY



Block II; lower ground, ground and typical upper floor plans of ten-storey block.

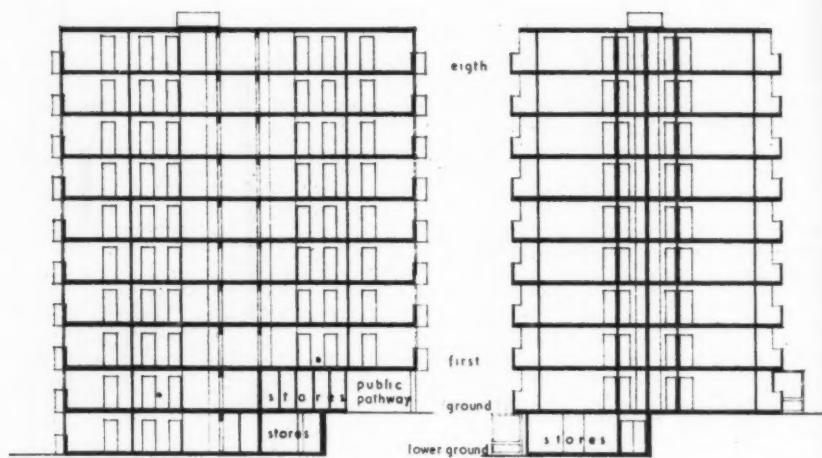
MA 3

Three-...

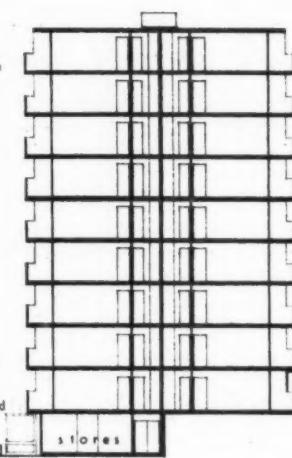
F 2

A&B

F 2

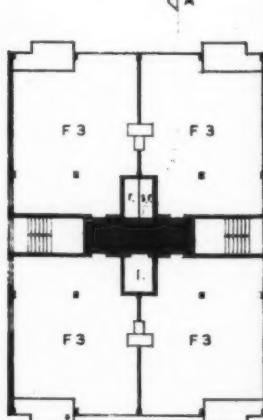
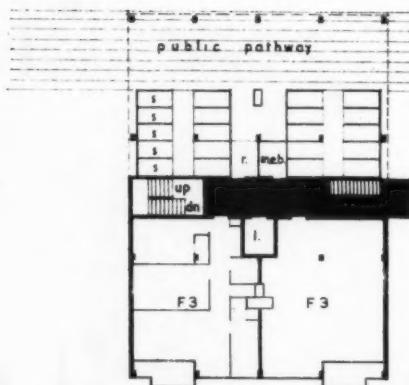
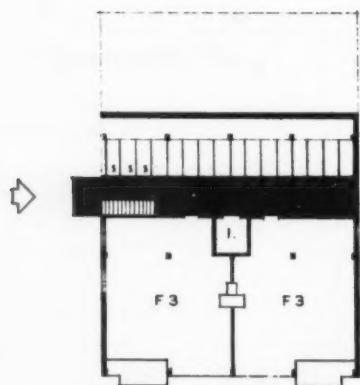


Section A-A.



Section B-B.

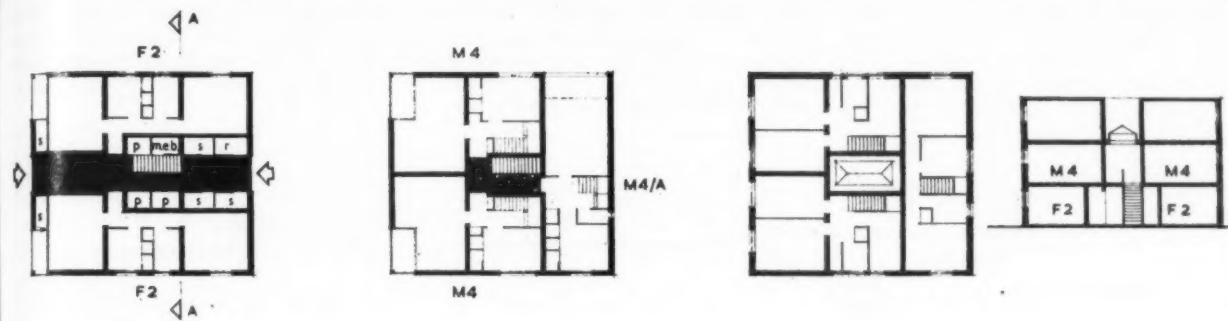
Four- a



Block I; lower ground, ground and typical upper floor plans.

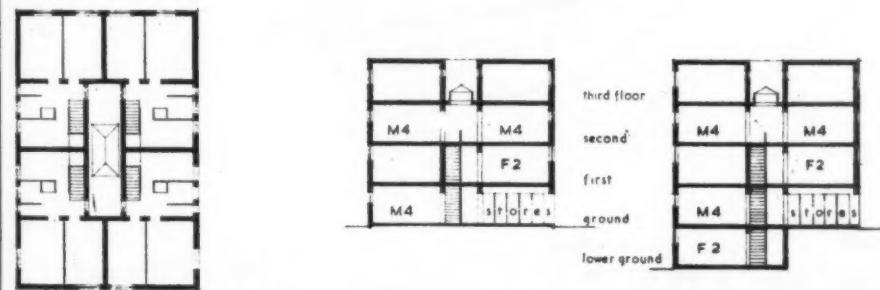
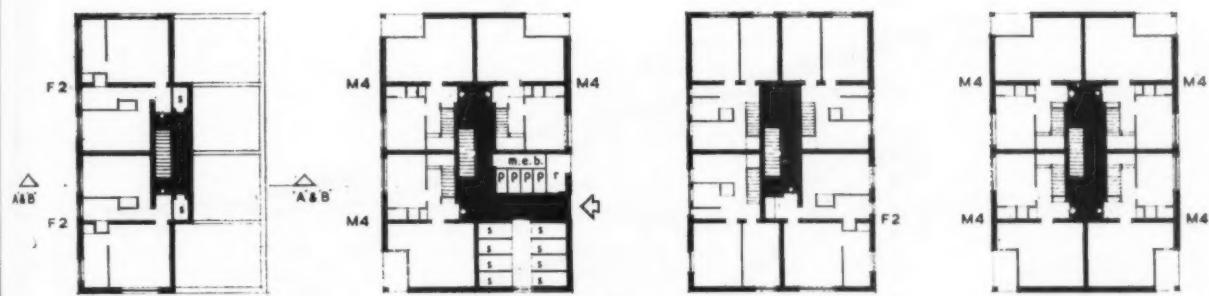
Type

MARY E. L. GRANELLI, M. RHYS-DAVIES, AND R. GRANELLI—continued



Three-storey block; ground, first, and second floor plans. See below for details of M₄ and F₂.

Section A.A.



Four- and five-storey blocks; upper row: lower ground, ground, first, and second floor plans; lower row: third floor plan, section A.A., section B.B.



Type M₄, lower and upper floor plans.

Type F₂ plan

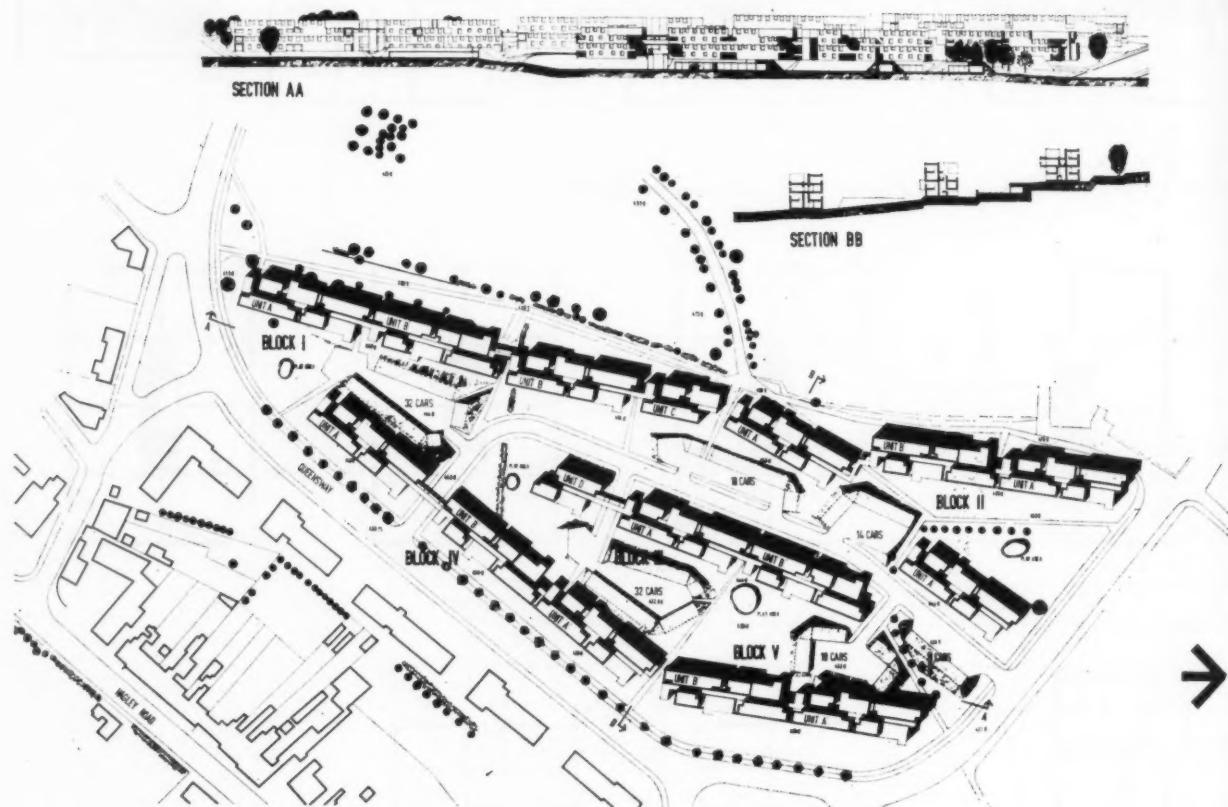
Halesowen Competition: SECOND PREMIATED DESIGN

BY

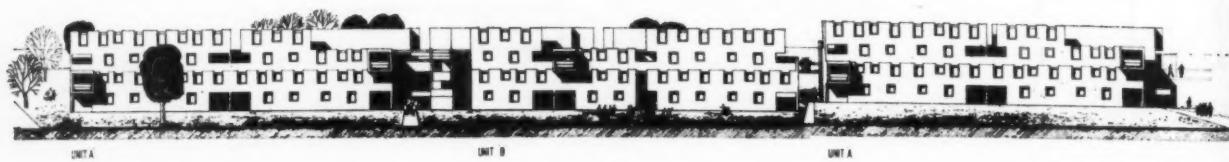
The assessor describes this as "... a subtle and original assembly of nicely-planned flats..." In his report he states that "This side-by-side assembly of maisonettes and flats along central walkways is most skil-

fully handled. The placing of the garages between the blocks is a bold idea, but this arrangement would have disadvantages from the noise point of view." In his criticism he observes that "some of the banked sides of

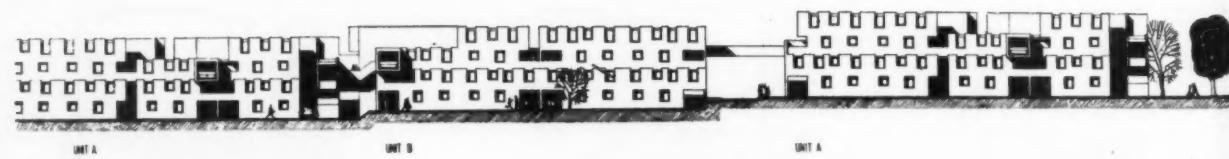
the garages come too close to ground floor flats. The access ways might become squalid and would have been more acceptable if they had a greater width and better finishes."



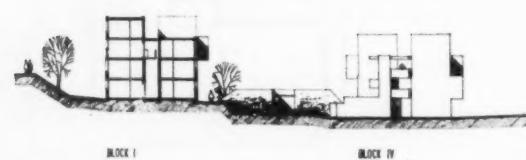
Site plan and sections.



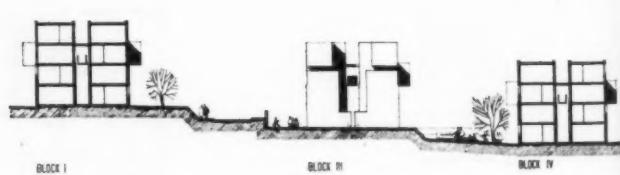
Block I, east elevation.



Block IV, west elevation.



Blocks I and IV, sections.

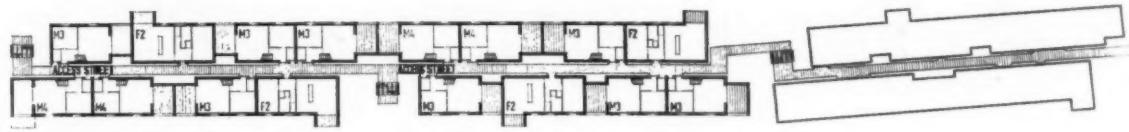


Blocks I, III and IV, sections.

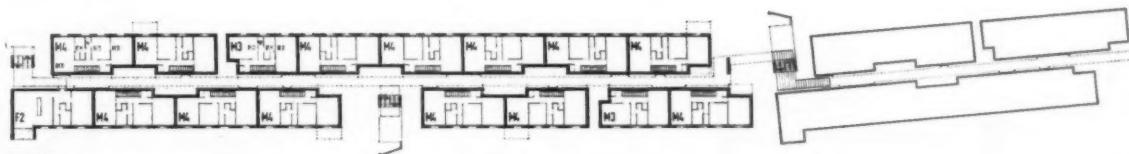
BY A. RADWAN, J. WARREN CHALK, AND R. HERRON



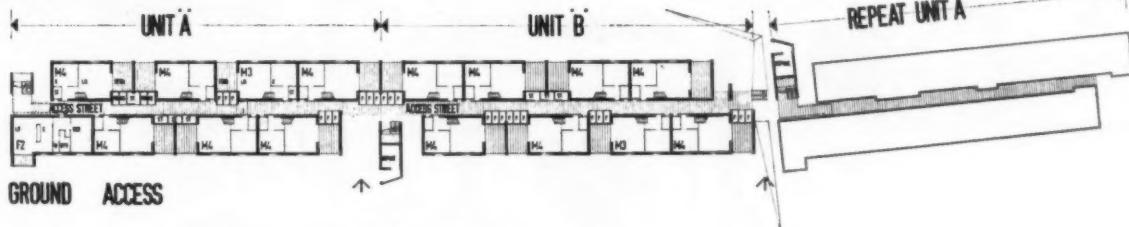
THIRD



SECOND ACCESS

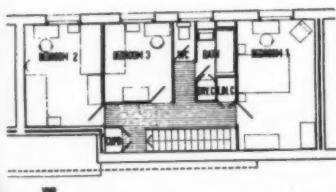


FIRST

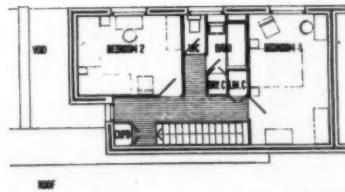


GROUND ACCESS

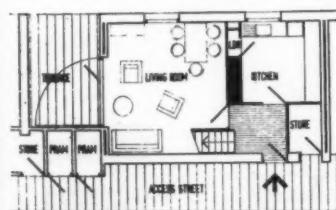
Typical block layout, block I. See below for details of M4, M3, and F2.



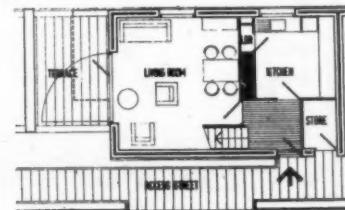
UPPER FLOOR PLAN



UPPER FLOOR PLAN



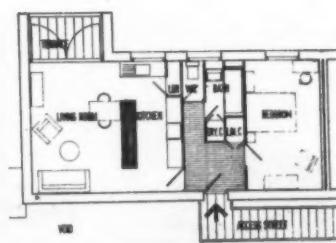
LOWER FLOOR PLAN



LOWER FLOOR PLAN

Type M4 plans.

Type M3 plans.



FLOOR PLAN

Type F2 plan.

Halesowen Competition: THIRD PREMIATED DESIGN

BY

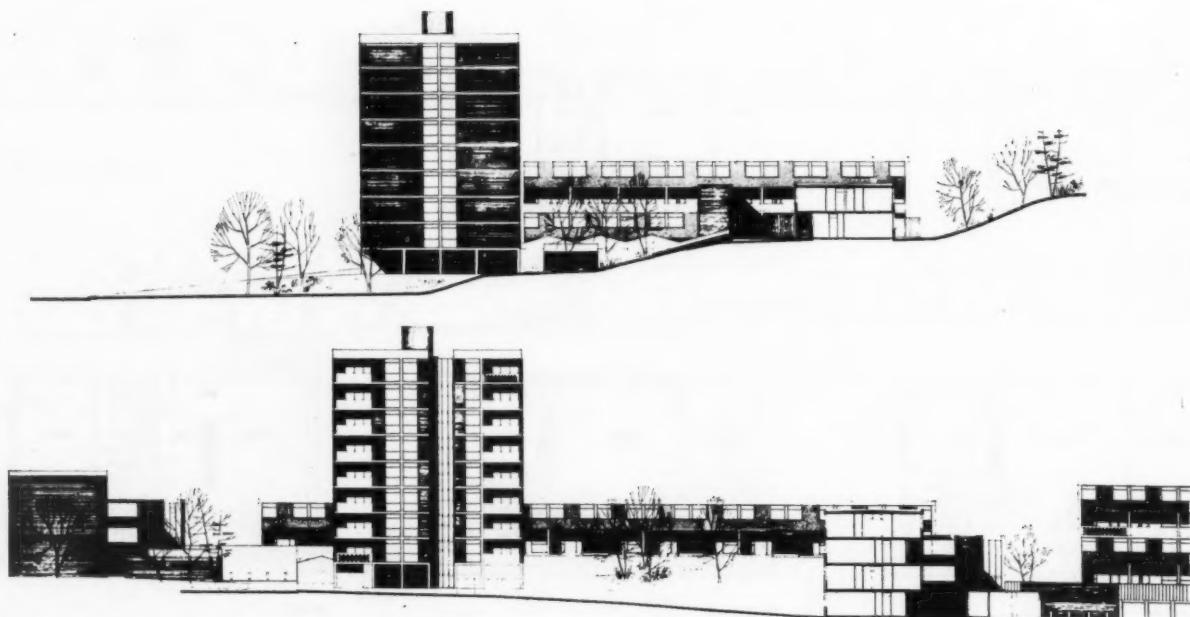
This design is the only one of the six award winners which, in layout, adheres to what might by now be called "post-war traditional." In the words of the assessor, it is a "... somewhat orthodox modern design

using a most skilful layout of 3 tower blocks combined with 4-storey maisonette blocks and 2-storey terrace houses." One cannot escape the impression that it is a textbook solution, that the tower blocks,

for example, are placed in precisely the correct position and that the 2- and 4-storey buildings are in proper relationship with each other—a fact one might assume even without the aid of the cast shadows on the drawing.

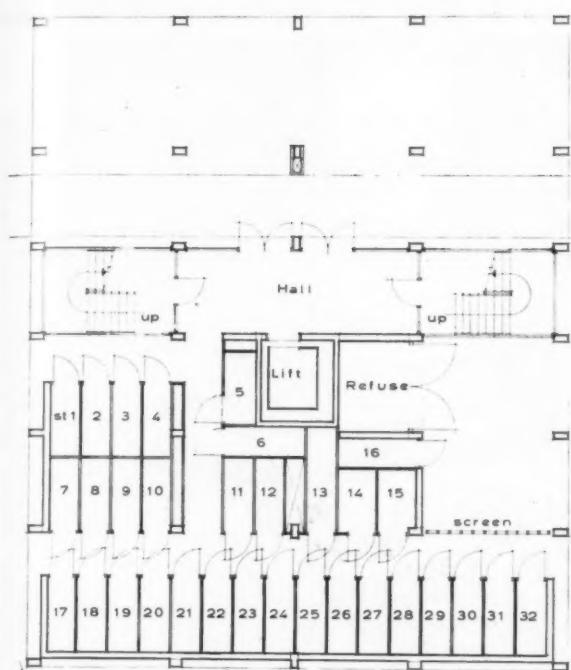


Site plan and sections.



Details of the sections above.

BY M. J. SMITH AND J. A. T. GOER



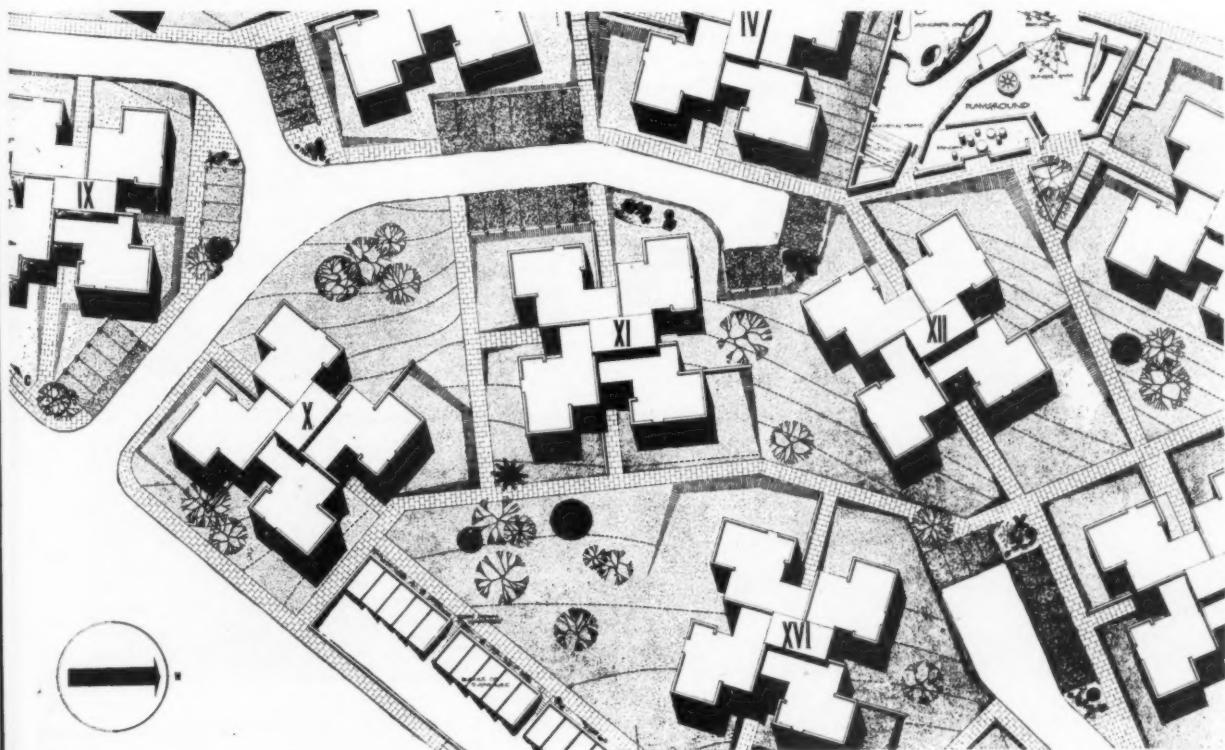
Tower block, ground and typical upper floor plans.

COMMENDED DESIGN BY EDWARD H. HARTRY AND ROMAN HALTER

This is the only other award winner which bears any resemblance in layout to the first premiated scheme. The authors have covered the whole of the site with a series of similar blocks which are described in the assessor's

report as "... a jagged spiral of flats around a central staircase." The layout lacks the imagination of the first premiated scheme and seems not to achieve what must be the prime justification for such a layout, namely

a sense of informality. The siting of the blocks results in a sameness which to tenants might well be confusing. None the less the scheme deserves its award for a refreshingly original approach.



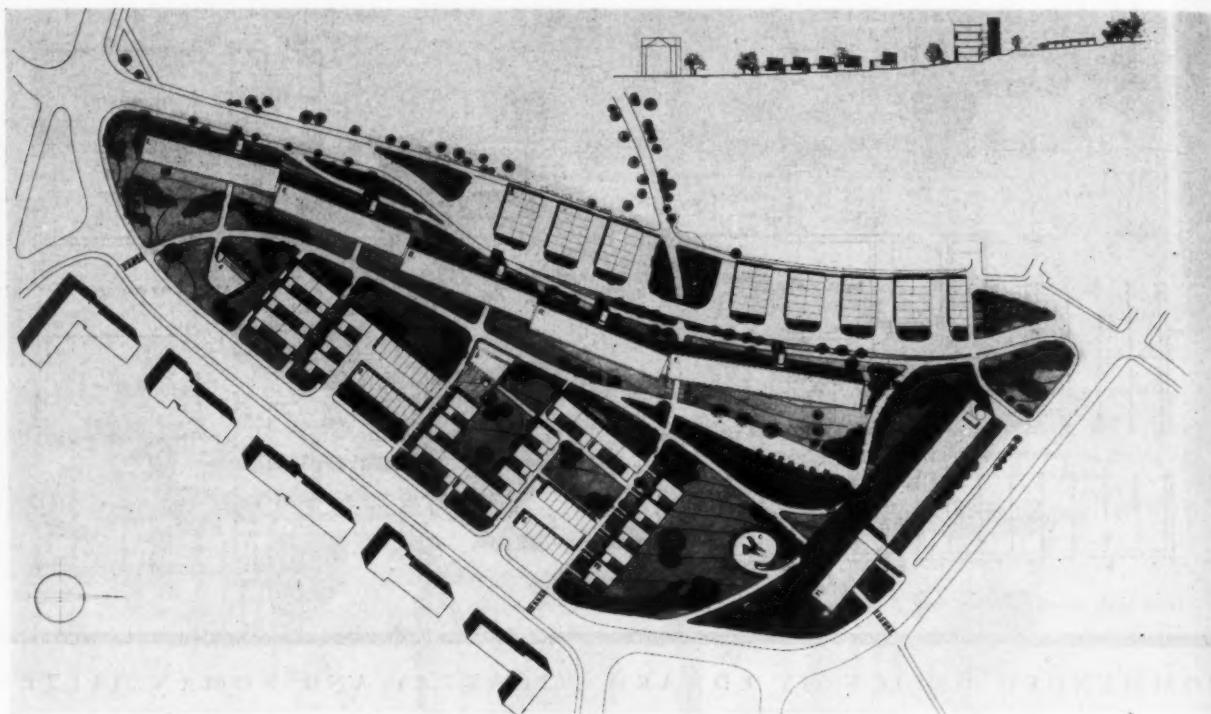
Detail of site plan.

Halesowen Competition: COMMENDED DESIGN BY DAVID DRY AND KATHARINA HALASZ

This scheme is probably the best presented of all. The impeccable freehand technique reflects the thought which has gone into the

scheme itself, a terrace of 4- and 5-storey maisonettes along the west boundary of the site and an interesting arrangement of court-

yard houses going down the hill to Queensway.



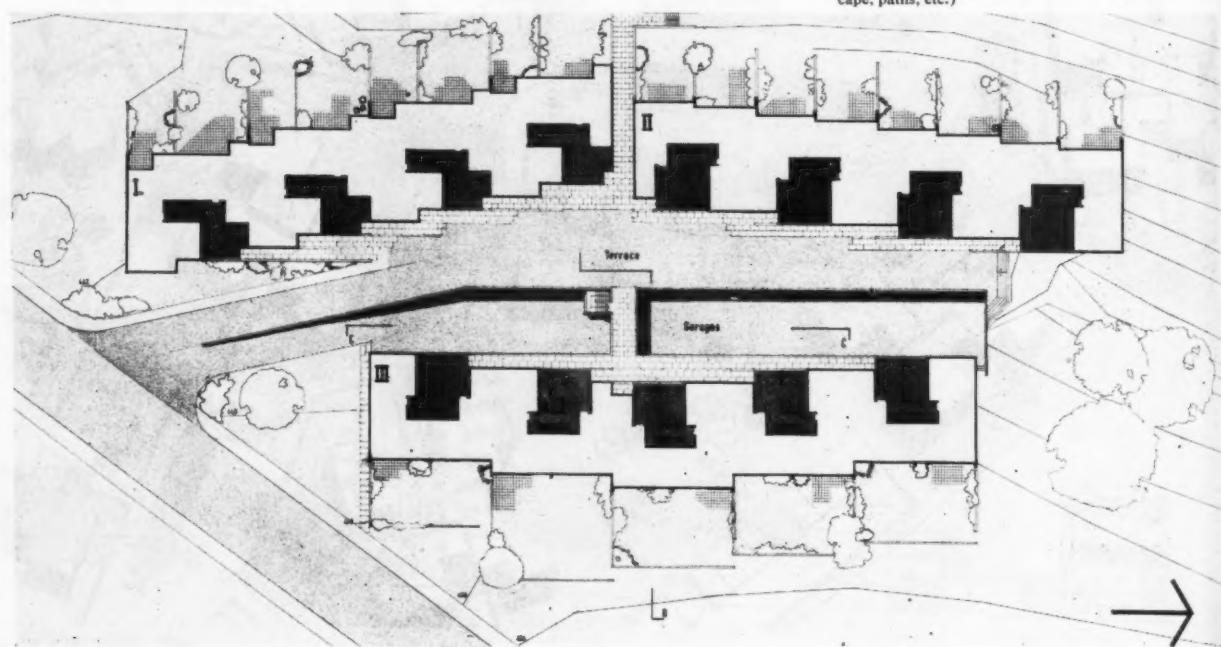
COMMENDED DESIGN BY J. BRUGES, F. R. BADEN POWELL, AND ROBERT BRIDGES

Eric Lyons describes this scheme as "a bold concept" but is critical of the authors' failure to give a clear picture of the landscape design, a fairly damning criticism in a competition in which landscaping is a basic

element of the design problem. The conditions of the competition actually state (in bold type) that "The design of the external spaces should be regarded as an important aspect of this competition. The drawing or

drawings required under para. 19e* provide the opportunity to show the general landscape character."

*Ground plan, Sections and Elevations, $\frac{1}{6}$ in. scale, of characteristic portion of scheme. (This need not cover more than a quarter of the site and should show the general design of the buildings and the design of landscape, paths, etc.)



working detail

DOOR: HOSPITAL IN SWINDON

Powell and Moya, architects

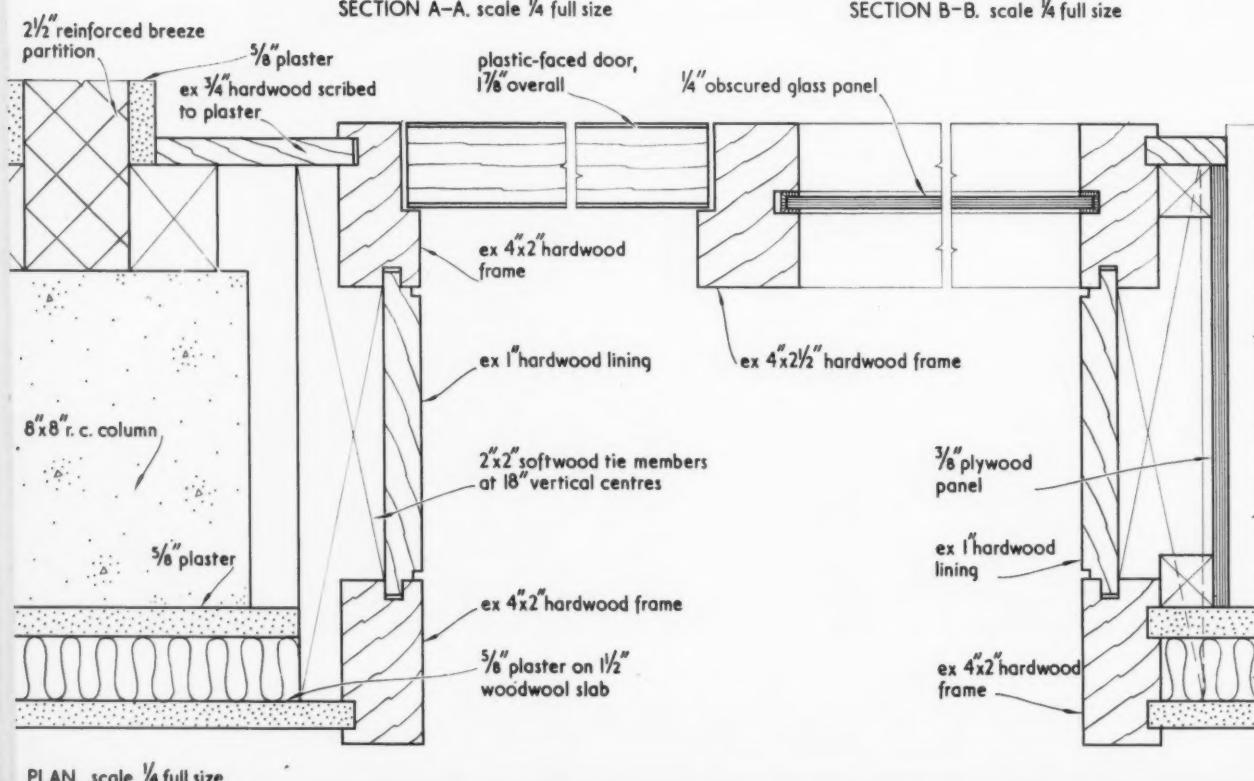
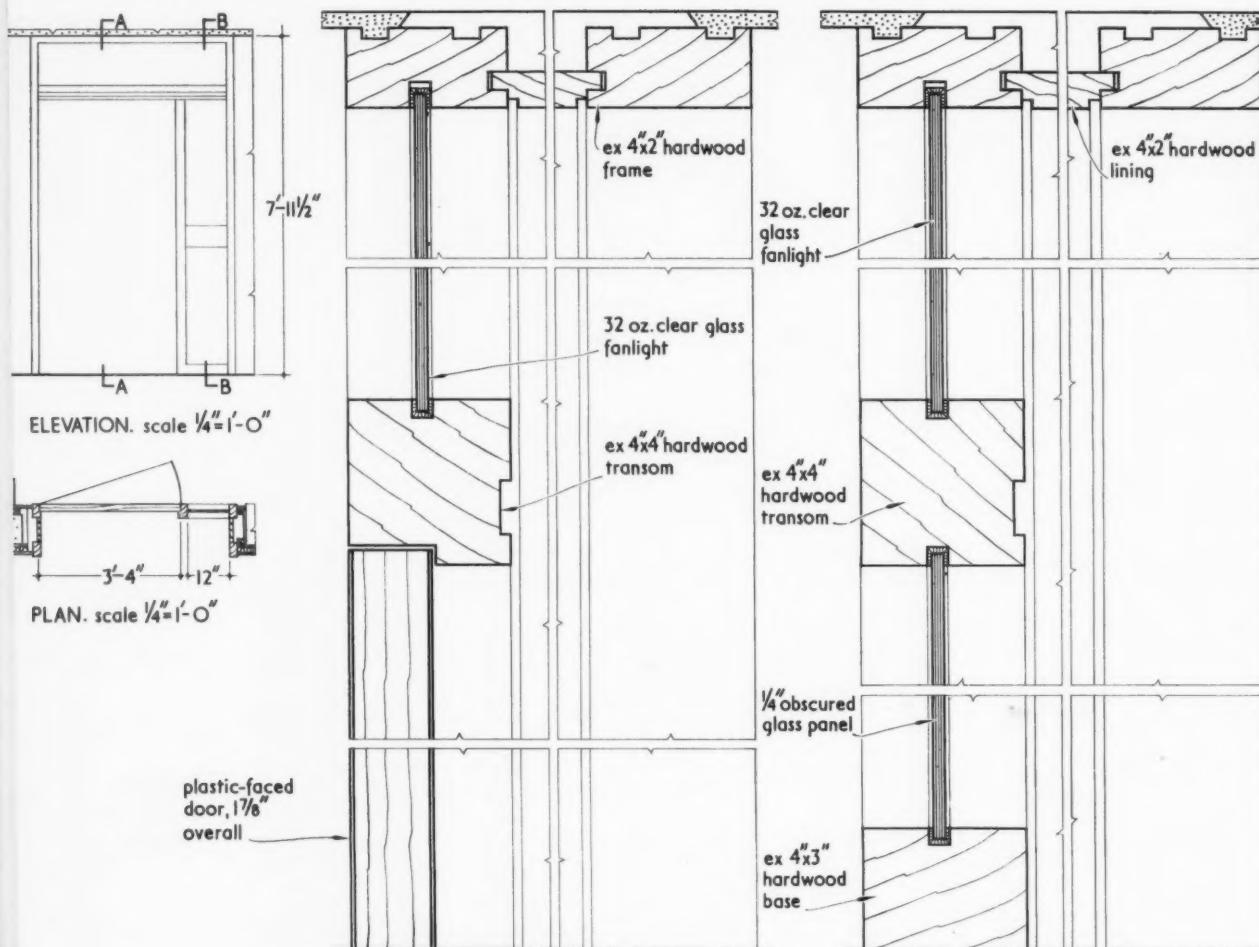


The interest in this doorway lies in the treatment of the linings. These are in effect a new version of the traditional panelled lining in that they are formed of an ex 1 in. panel secured between two 4 in. by 2 in. frames. As the panel is flush with the frames (with only a checking at the joints) and as separate frames for the glazing have been eliminated, the resulting architectural form is greatly simplified. The effect is one of high quality achieved with no sacrifice of asceticism.

working detail

DOOR: HOSPITAL IN SWINDON

Powell and Moya, architects

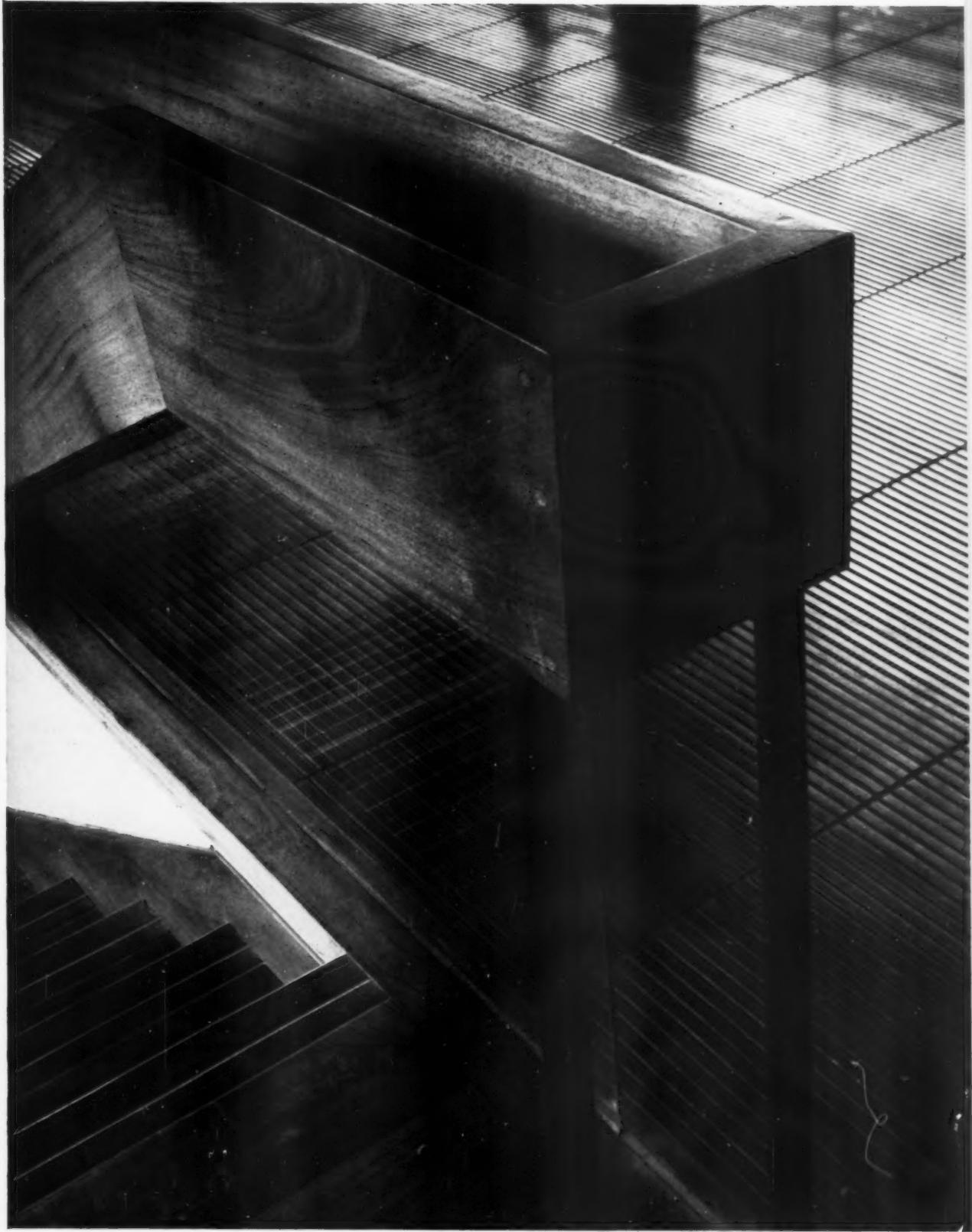
(32)
DOORS: 46



working detail

BALUSTRADE: HOSPITAL IN SWINDON

Powell and Moya, architects

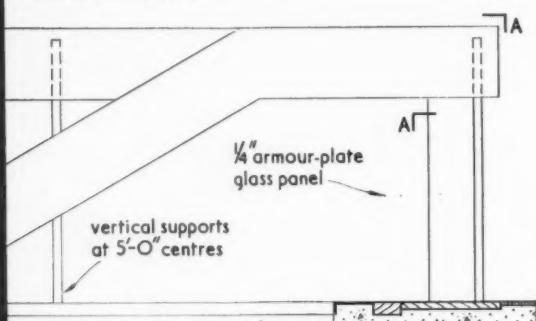


This detail is a good example of a design policy which aims at reducing the number of visible planes to a minimum. Note the halving of the m.s. balusters so that their forward edge can be on a plane with the face of the handrail and the placing of the hardwood member which receives the bottom edge of the glass so that it is flush with the floor horizontally and with the staircase wall vertically.

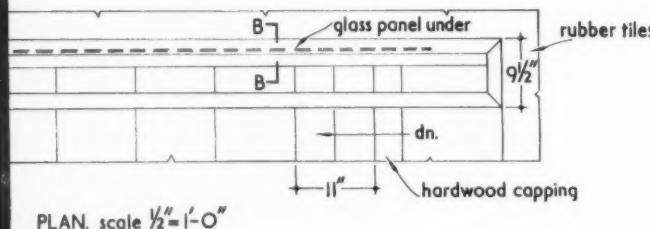
working detail

BALUSTRADE: HOSPITAL IN SWINDON

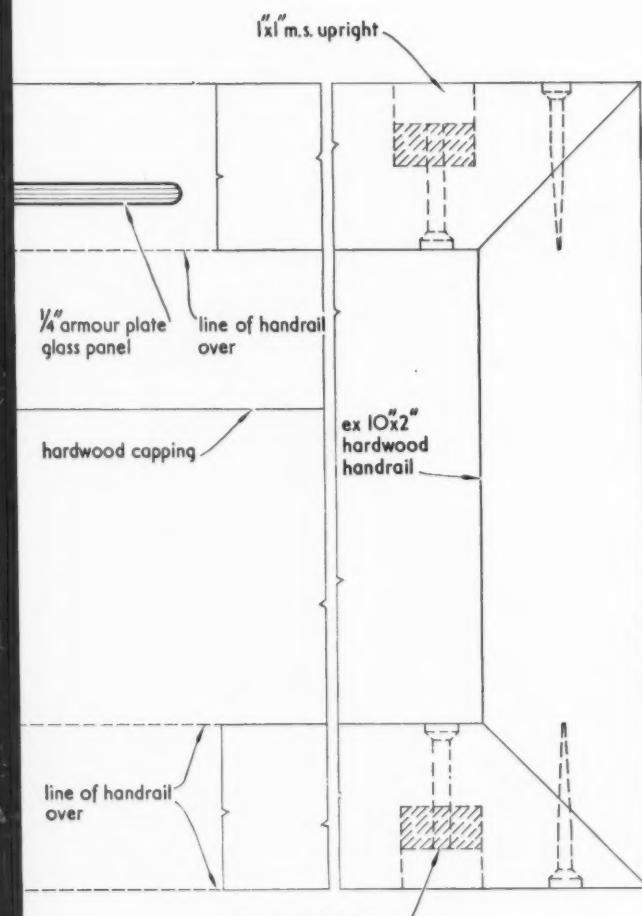
Powell and Moya, architects



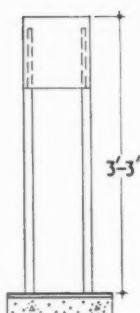
ELEVATION. scale 1/2"=1'-0"



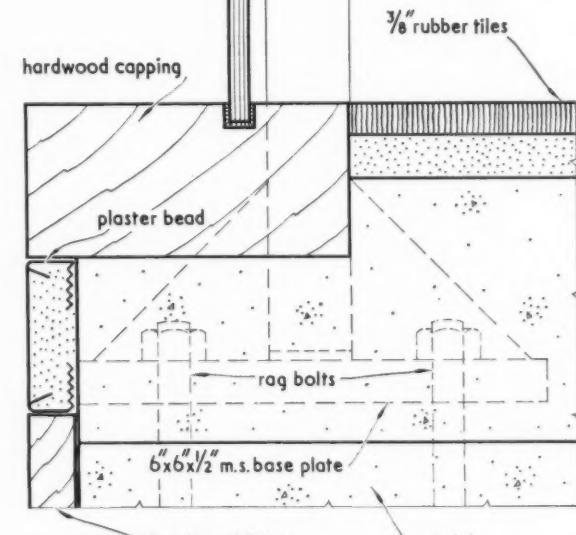
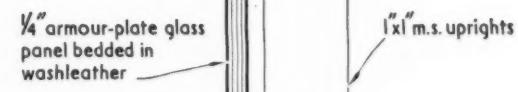
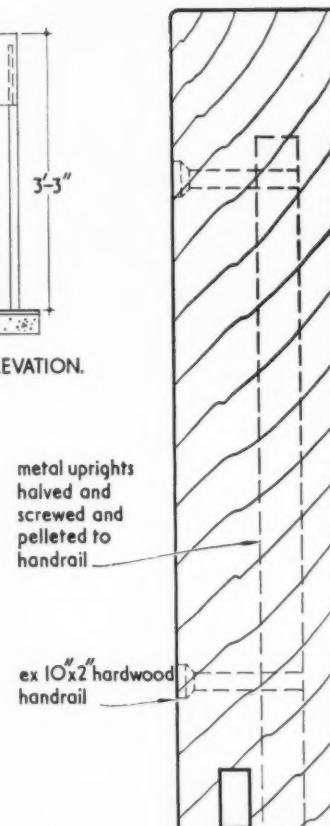
PLAN. scale 1/2"=1'-0"



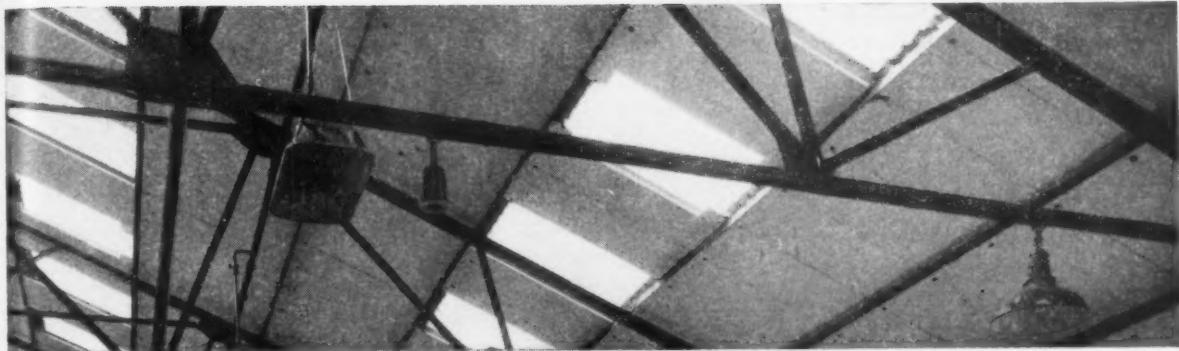
PLAN A-A. scale 1/2 full size



END ELEVATION.



SECTION B-B. scale 1/2 full size



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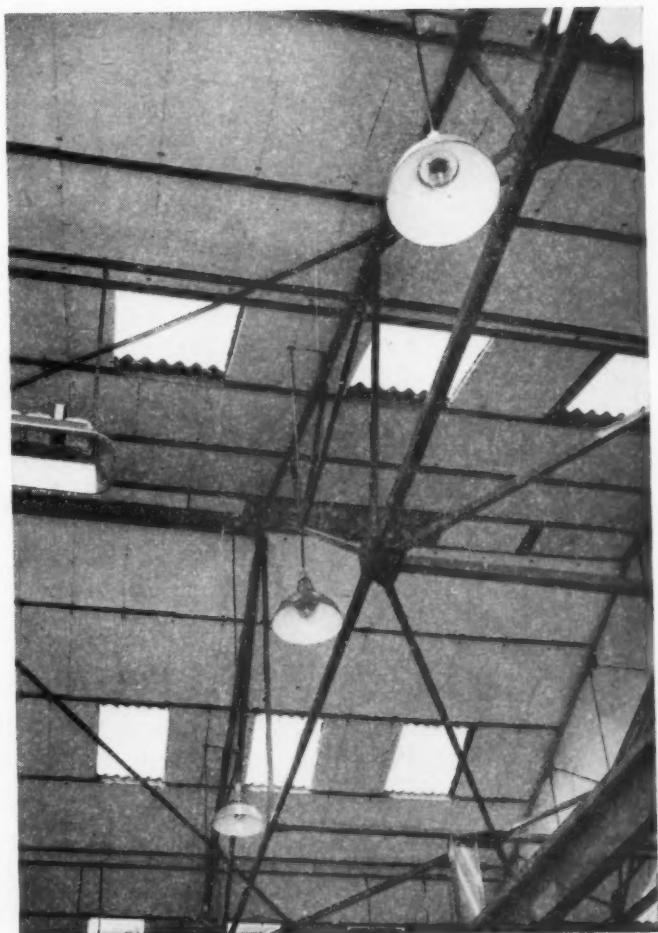
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*MARLEYCEL

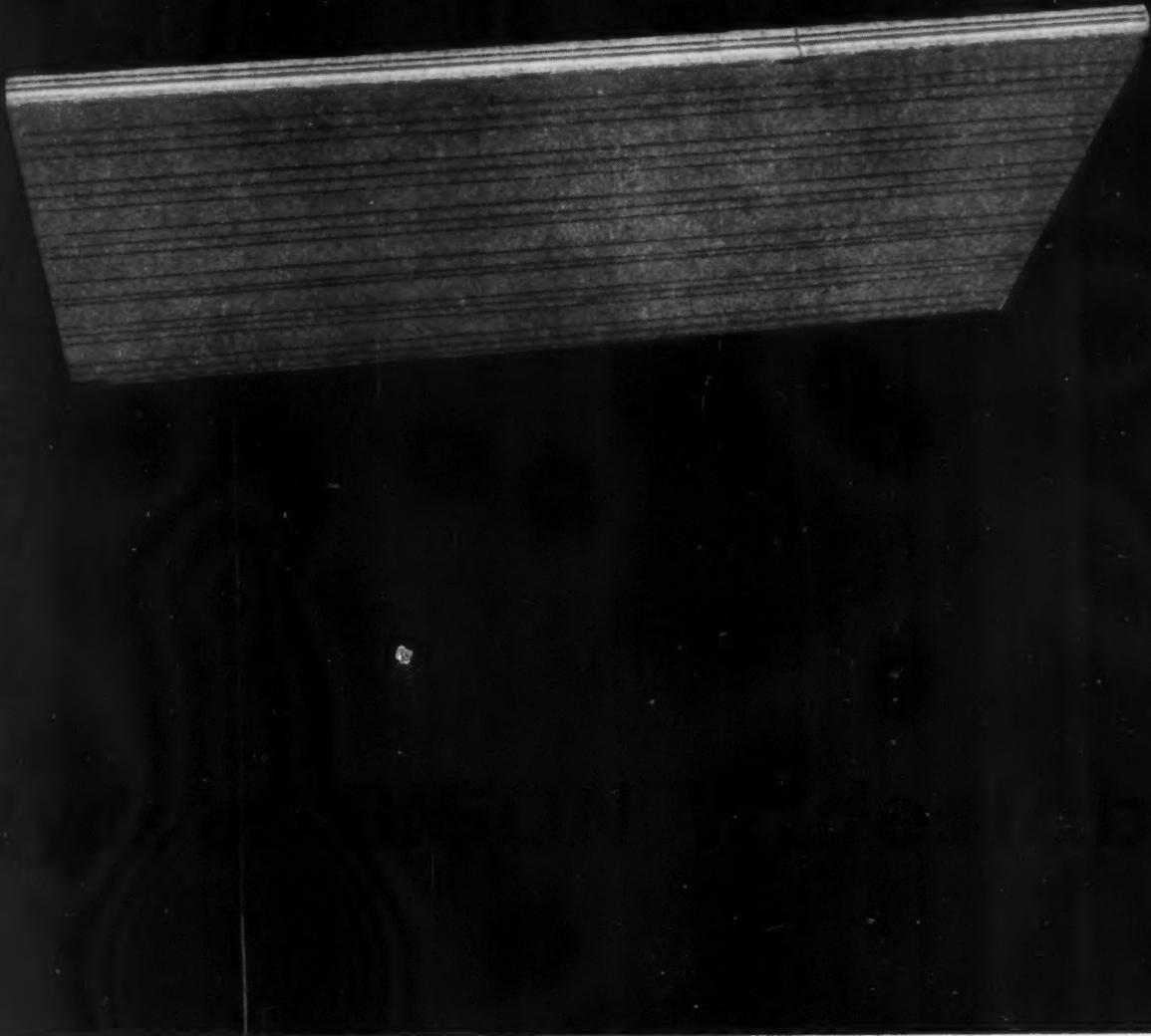
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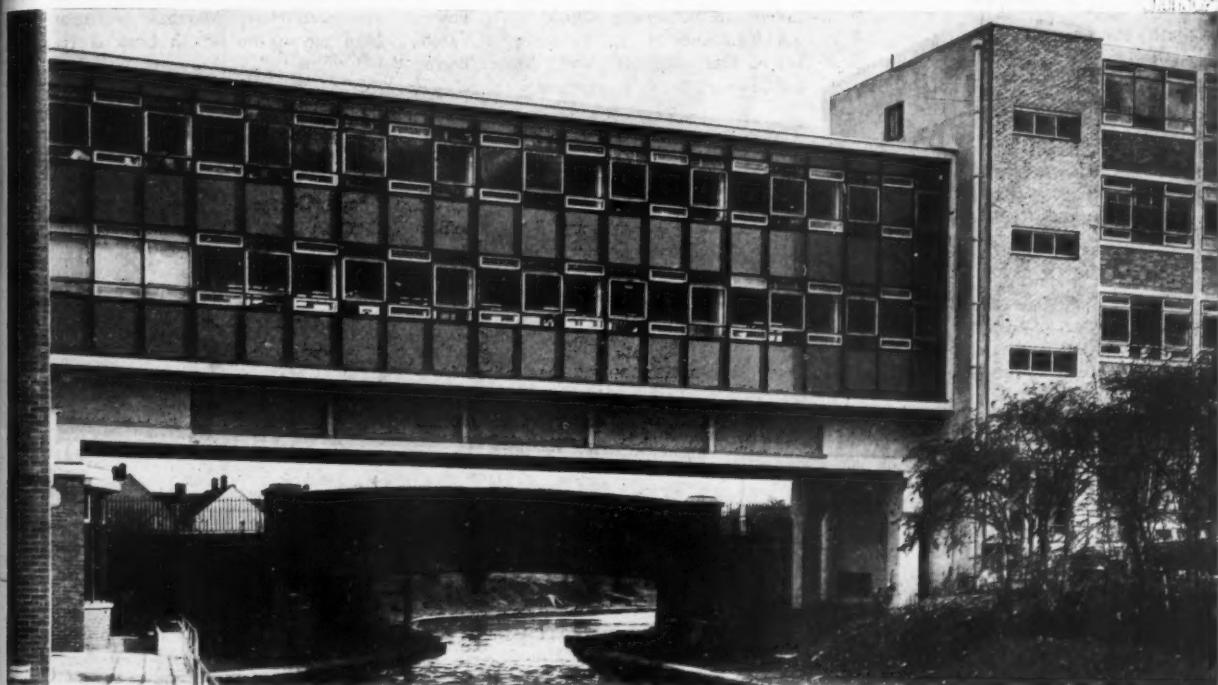
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Announcements

PROFESSIONAL

Frank Rutter, F.R.I.B.A. has opened an office at 60, Woodbridge Road, Guildford, Surrey (telephone Guildford 60235). The office at 2, Finchley Road has been closed.

Gotch & Partners have opened an additional branch office at 29, Richmond Hill, Bournemouth, where they will be pleased to receive trade catalogues and technical literature.

Reginald H. Gallannaugh, L.R.I.B.A., has taken J. A. Spon, A.R.I.B.A., and N. F. Beardsworth, B.A.(Arch), A.R.I.B.A., into partnership. The name of the practice is now Reginald H. Gallannaugh & Partners.

J. Coulson Backhouse, architect, has closed his office at Broughton Rise, Malton. He has retained the office at Russells Brewery and opened another one at North End, Hutton Rudby, nr. Yarm (telephone Hutton Rudby 319).

J. & C. Whitehead, A.R.I.B.A., are now practising from 1, Crown Street, Bury St. Edmunds, Suffolk, and 2, New Court, Lincoln's Inn, London, W.C.2.

It is proposed to form a permanent exhibition of Building and Decorating Materials at 9, Valaoritou Street, Athens. Any manufacturers who are interested in exhibiting should write to the managing director.

J. B. F. Cowper & Poole, F.R.I.B.A., have taken into partnership Ann M. L. H. Towns, A.R.I.B.A., and M. L. Reynolds, M. Arch., M.C.P., A.R.I.B.A. The firm will now be known as Cowper, Poole & Partners.

The partnership of du Bosky and Kinsler, chartered quantity surveyors, has been dissolved. P. S. du Bosky is now practising as du Bosky & Partners at 28, Berkeley Square, W.1, and at 95, Clarkehouse Road, Sheffield 10. L. R. Kinsler is practising as L. R. Kinsler & Partners at 78, Mount Street, W.1.

TRADE

G. A. Rendle, B.Sc., M.I.E.E., has retired from the position of Deputy General Manager of British Insulated Callender's Construction Co. Ltd.

Goodenough Pumps Ltd. have appointed W. J. S. Blunt Midlands representative of the company.

The British Plaster Board (Manufacturing) Ltd. have moved their Head Office to Ferguson House, 15/17, Marylebone Road, London, N.W.1 (telephone Hunter 4021).

The Industrial Fan & Heater Co. Ltd., one of the members of the Simms Group of Companies, have moved their London headquarters to Remax House, Alfred Place, London, W.C.1 (telephone Langham 9561).

The Yale & Towne Manufacturing Co. have appointed Harry Marshall as Export Sales Manager of the British Lock & Hardware Division.

Bell & Cole Publicity Ltd. have moved to Ibex House, The Minories, London, E.C.3 (telephone Royal 0931).

Rhodes Chains Ltd. announce that Herbert Huxham Millett has retired from the position of Sales Director.

Press & Public Relations Ltd. have moved to Ferguson House, 15/17, Marylebone Road, London, N.W.1 (telephone Welbeck 7431).

Corrections

A photograph of 26-storey offices to be built in Accra appeared in AJ, May 5, 1960, under the heading "Project for Offices in Nigeria." Accra is of course the capital of Ghana, as the caption to the picture made clear.

We regret the mistake which appeared in our issue of April 21 under Trade Announcements when we stated that A. G. Norman had retired from the chairmanship of Formica International Ltd. Mr. Norman is still chairman of Formica International Ltd., but has relinquished his chairmanship of Formica Ltd.

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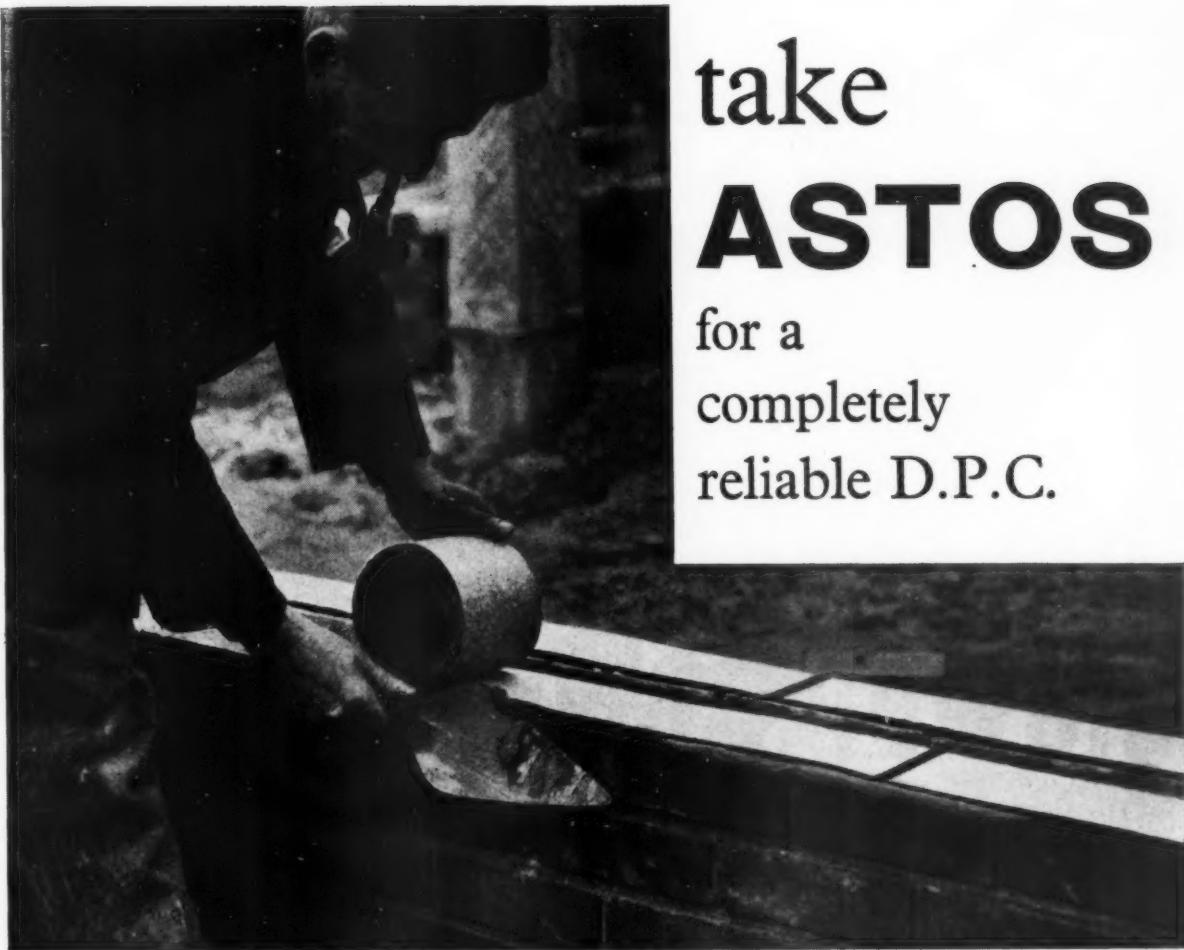
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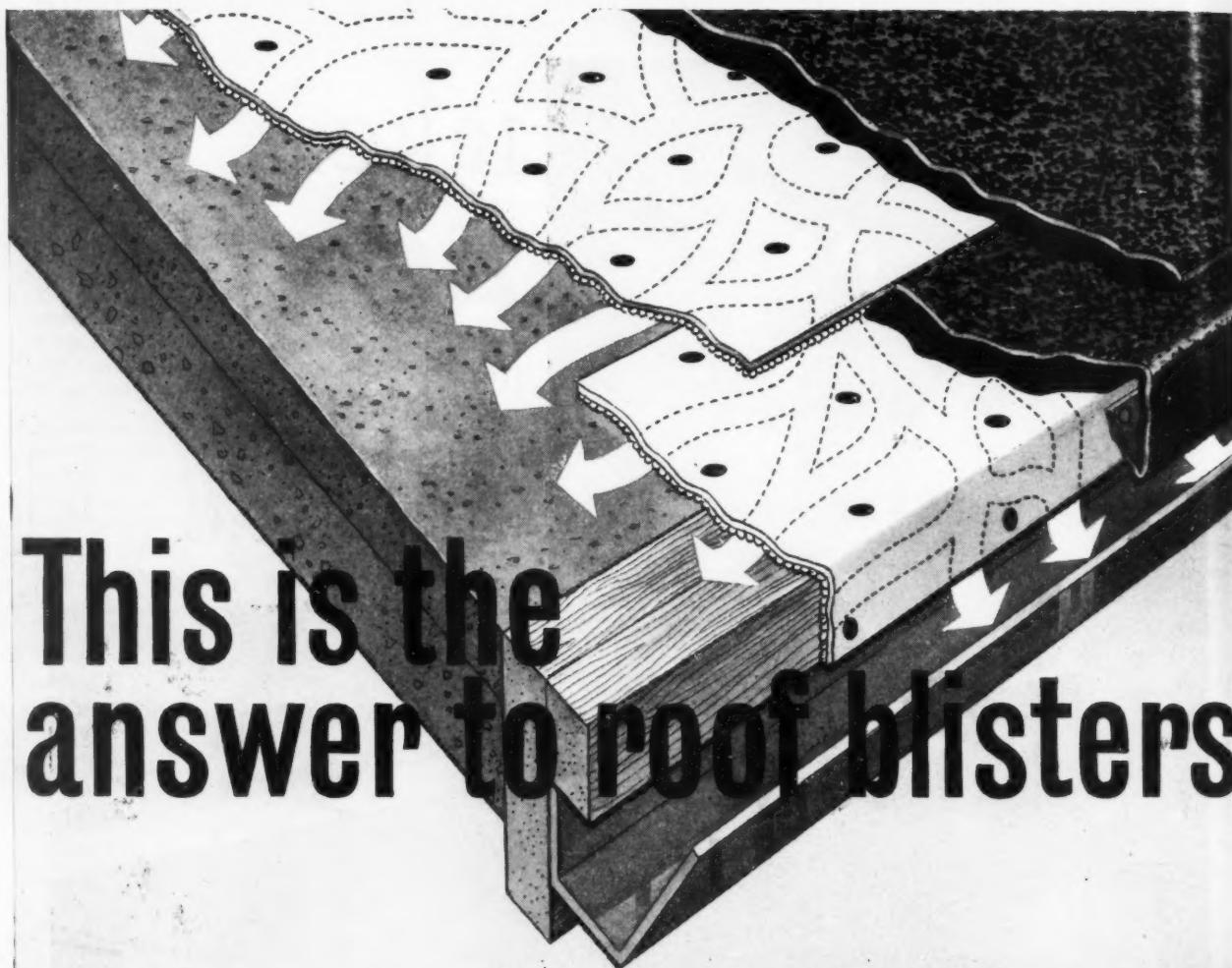
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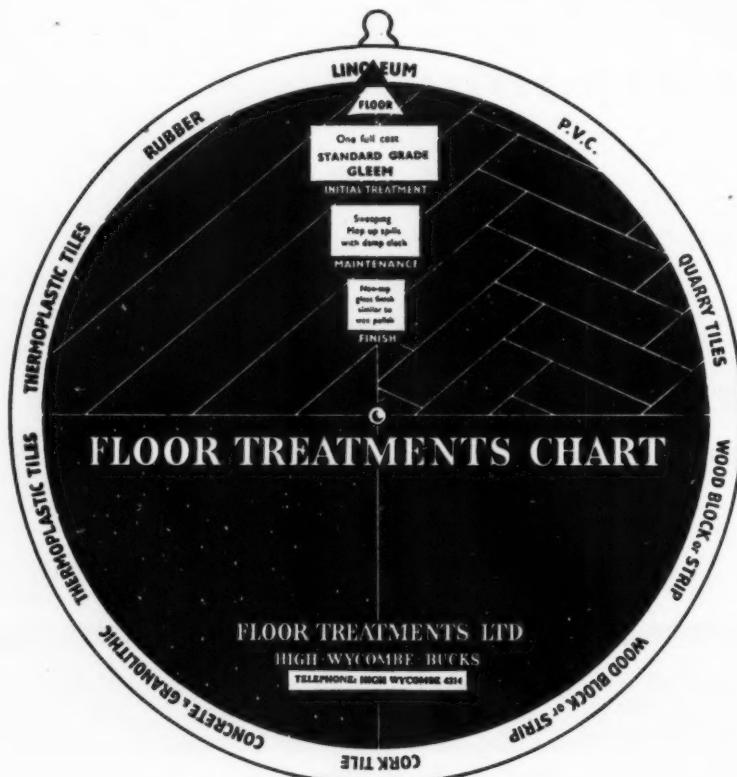


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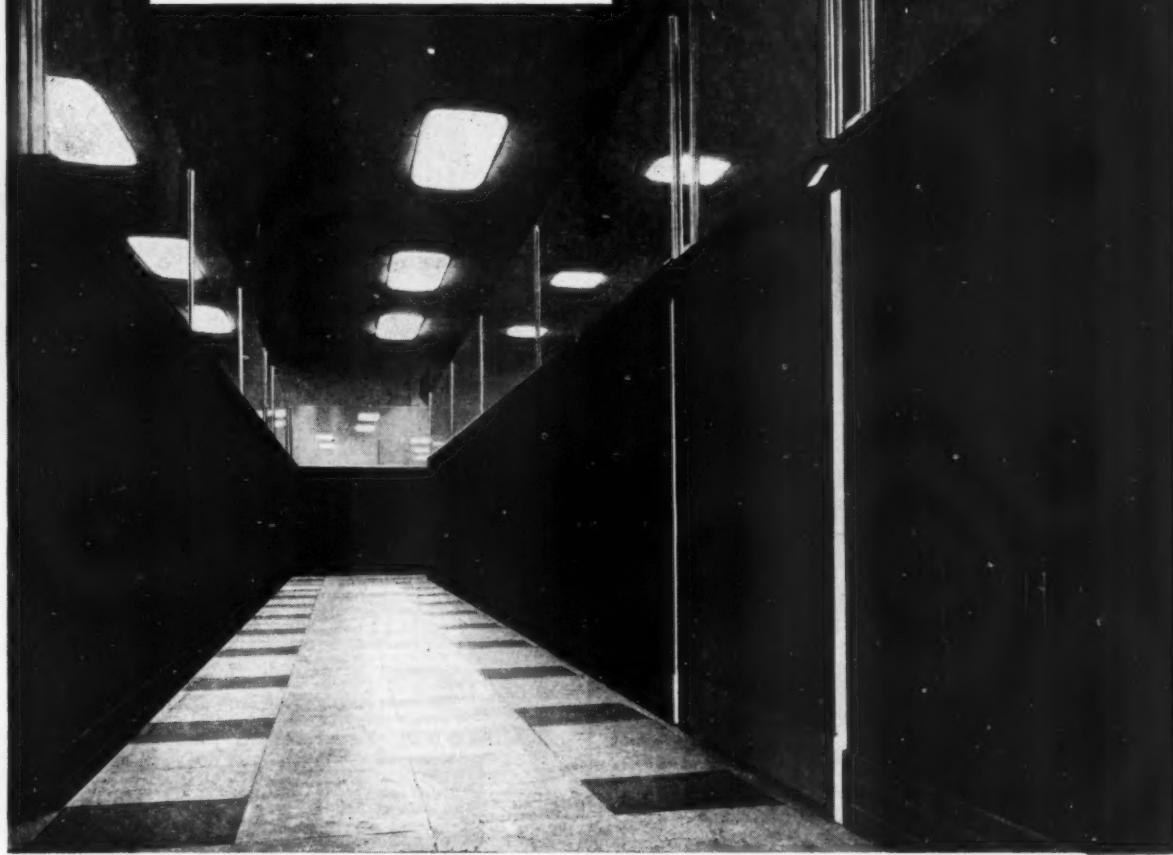
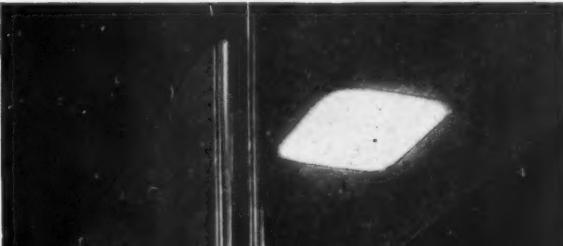
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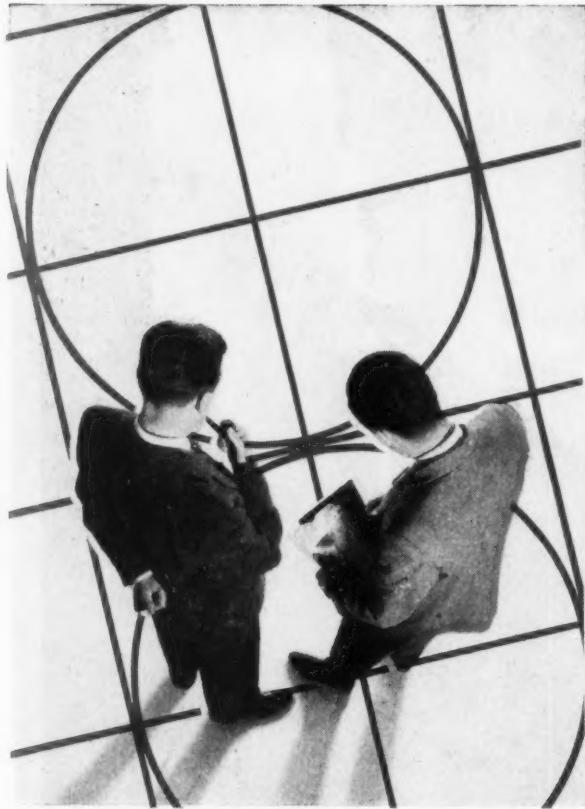
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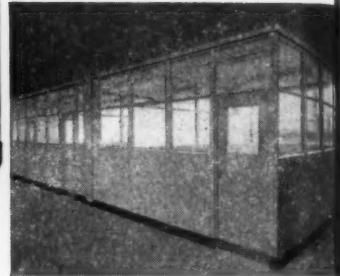
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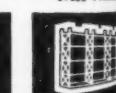
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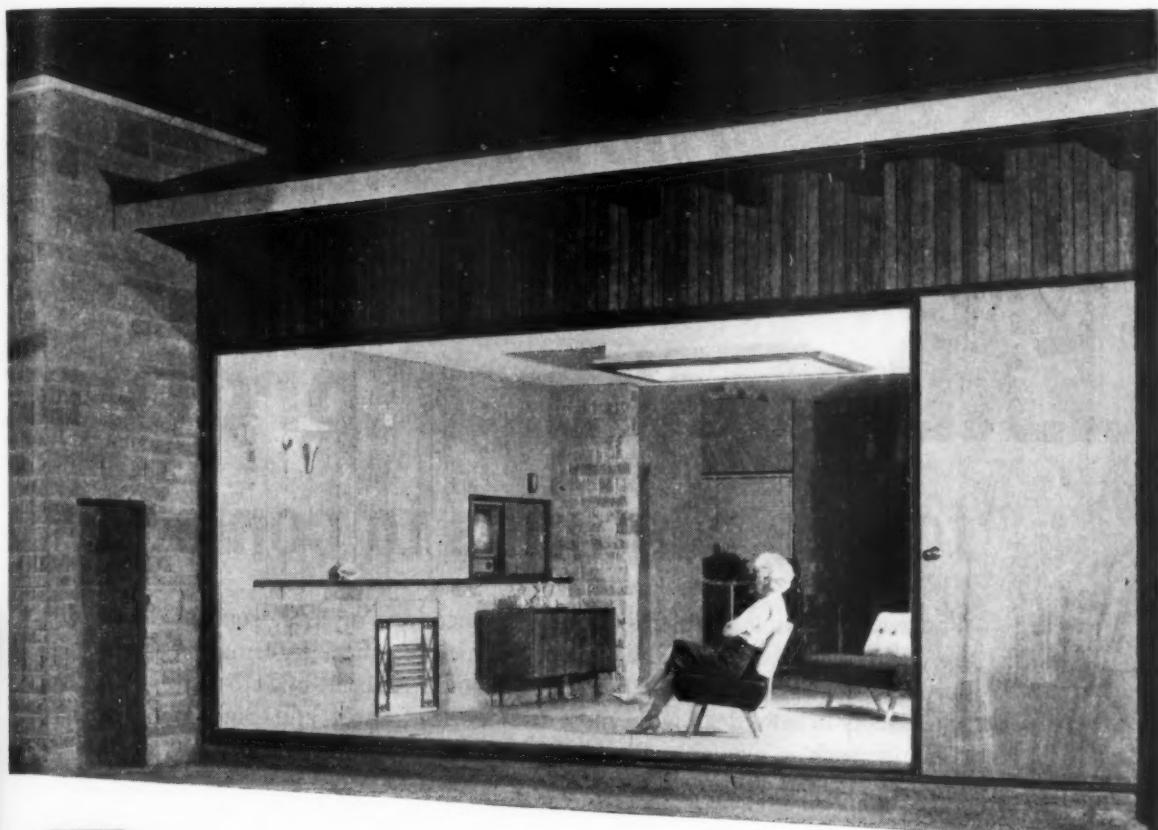


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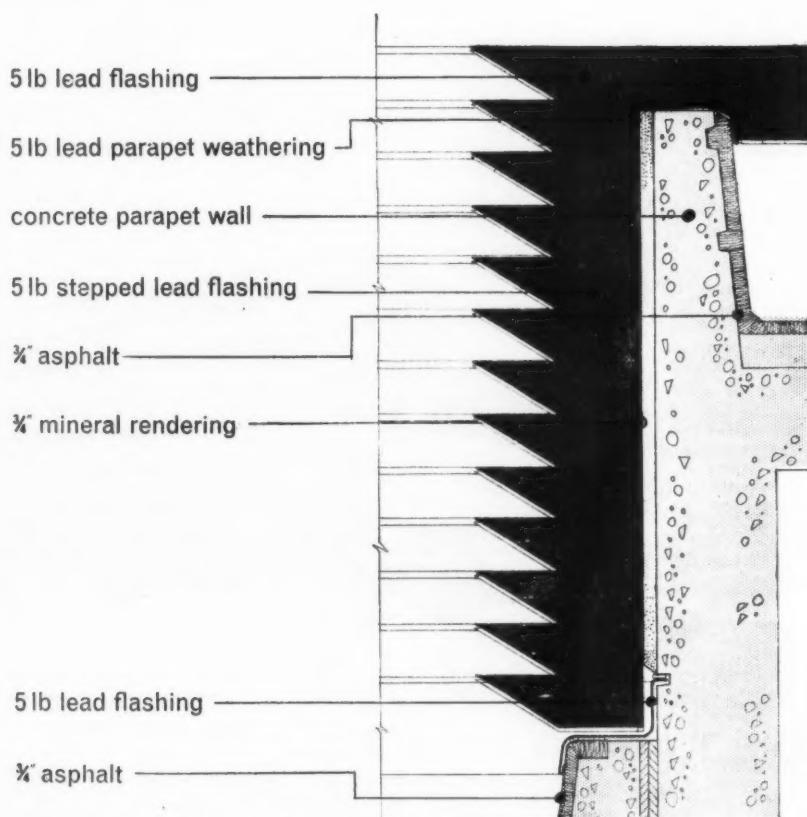


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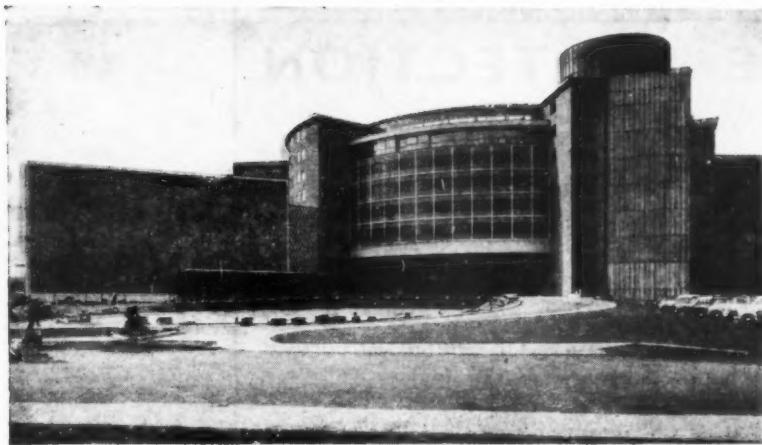
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of Norman and Dawbarn, in association with
M. T. Tudsbery C.B.E., F.C.G.I., M.I.C.E.
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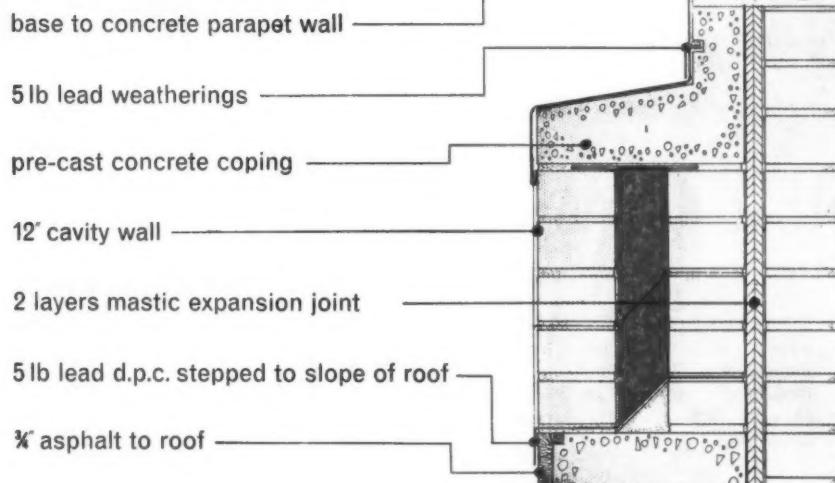
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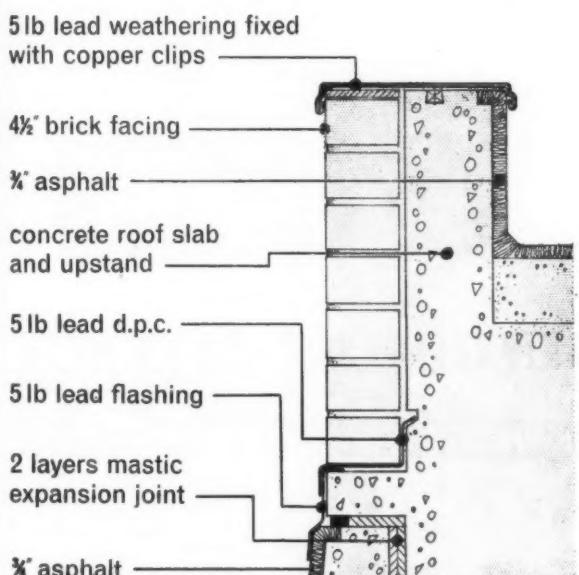
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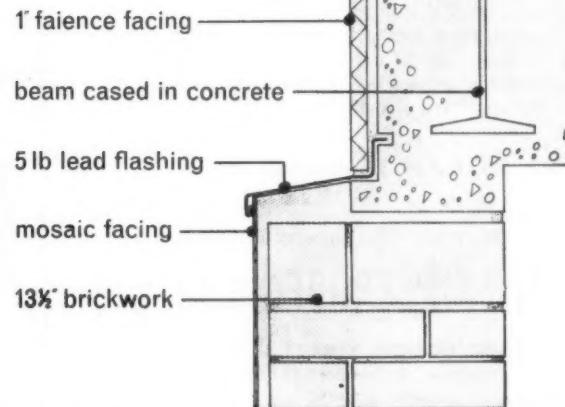
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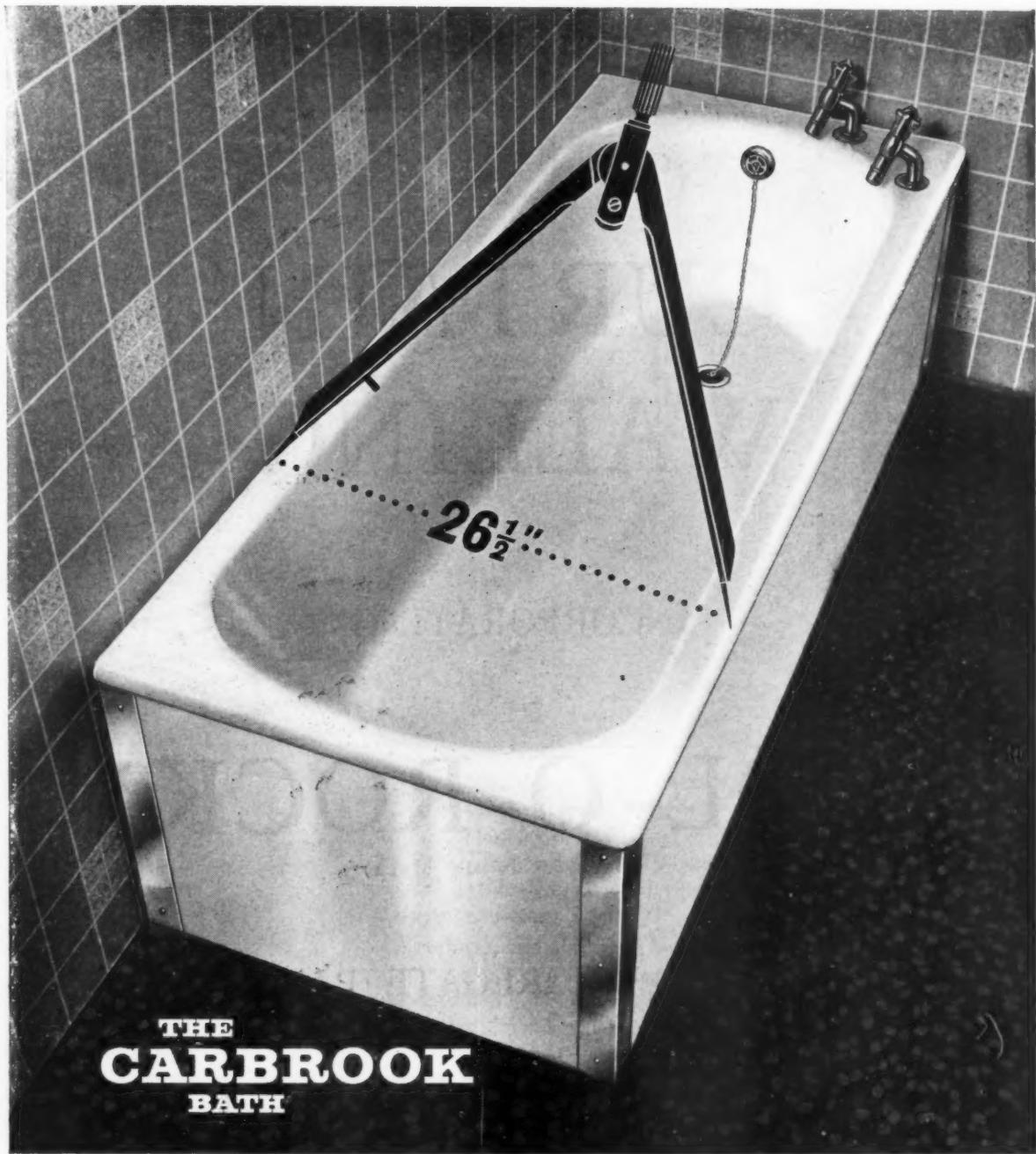
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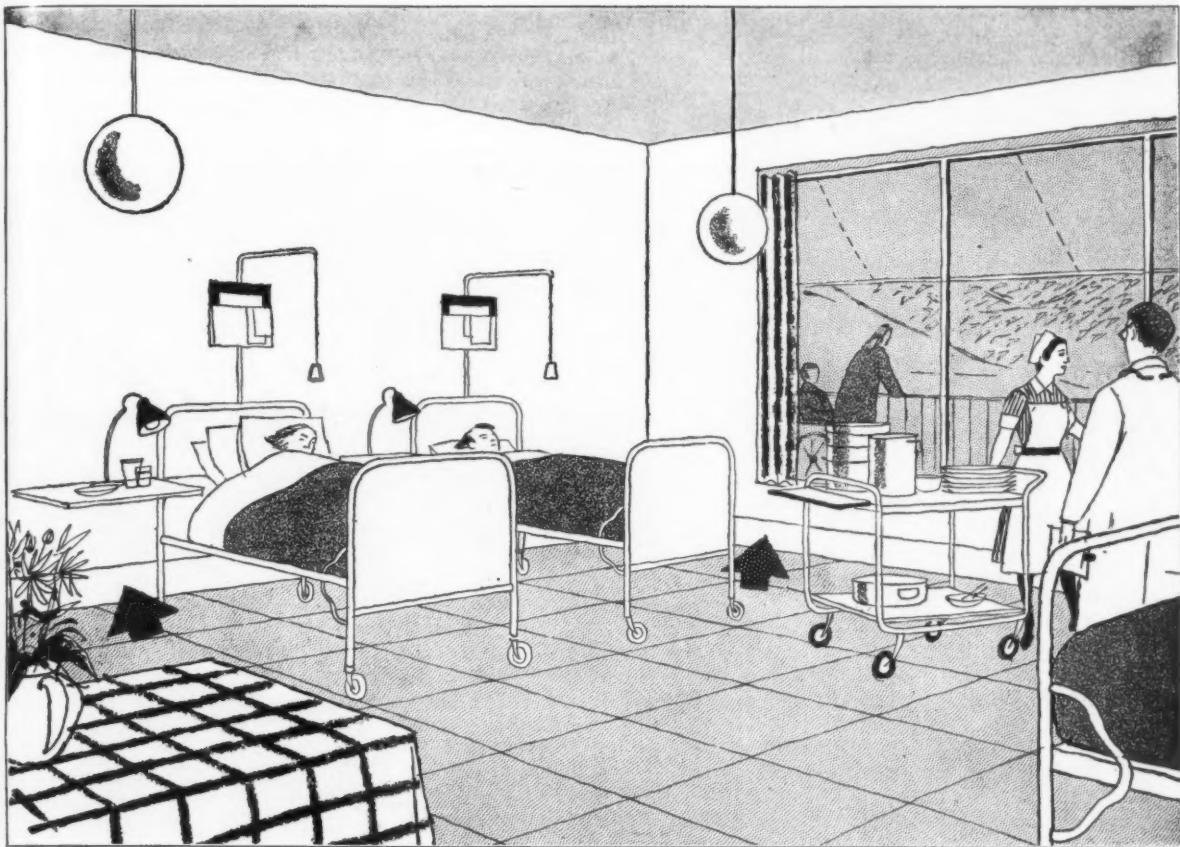
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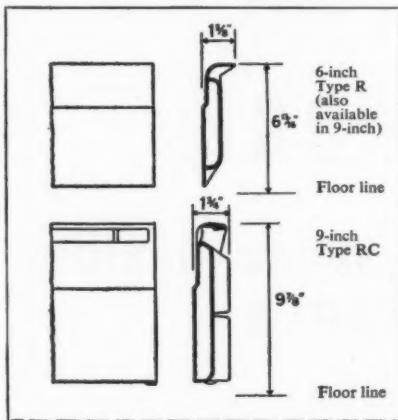
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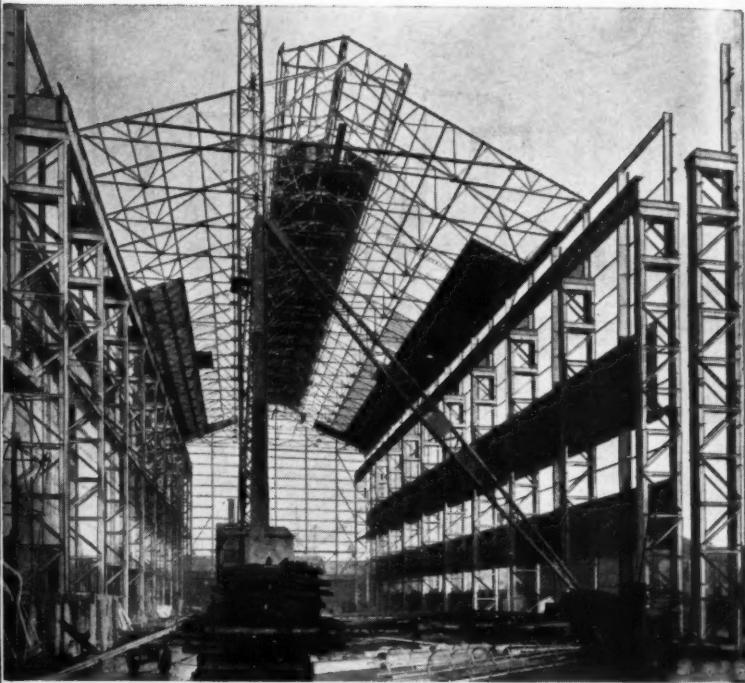
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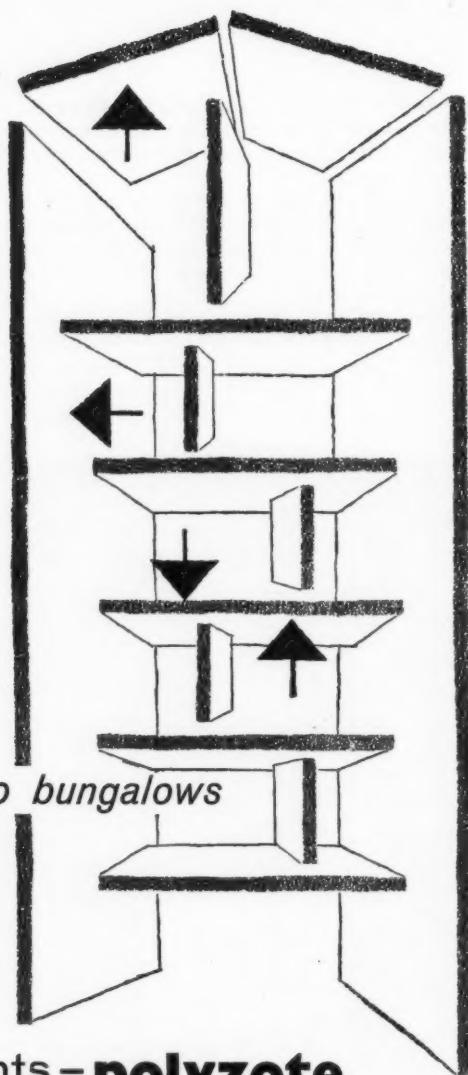
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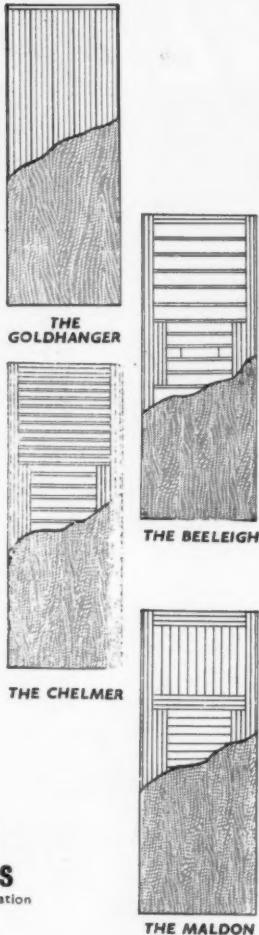
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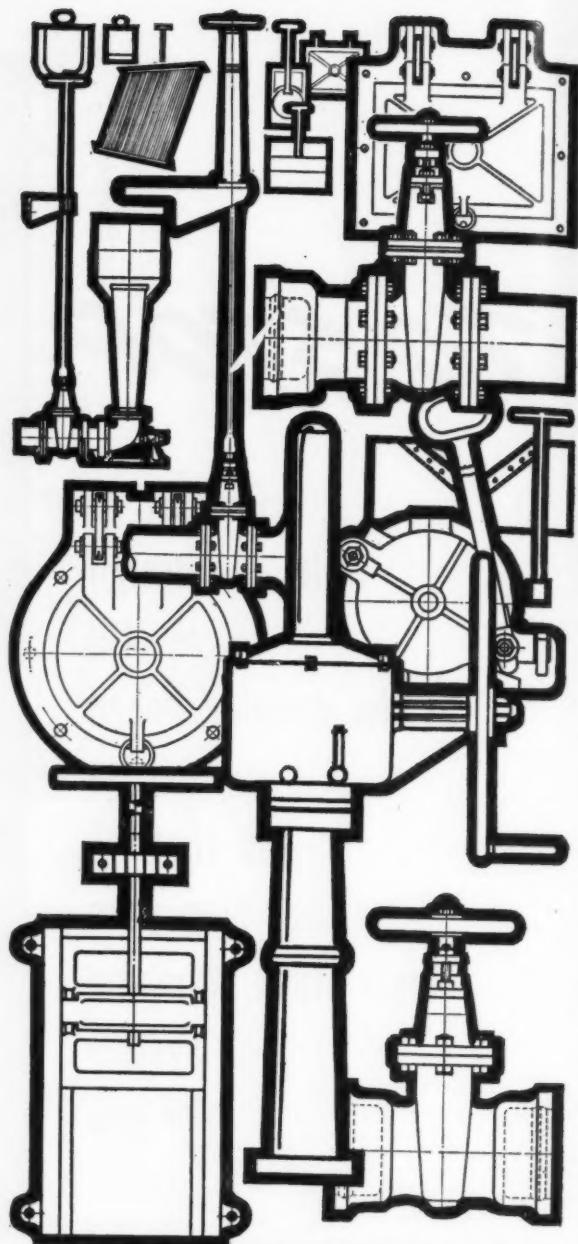
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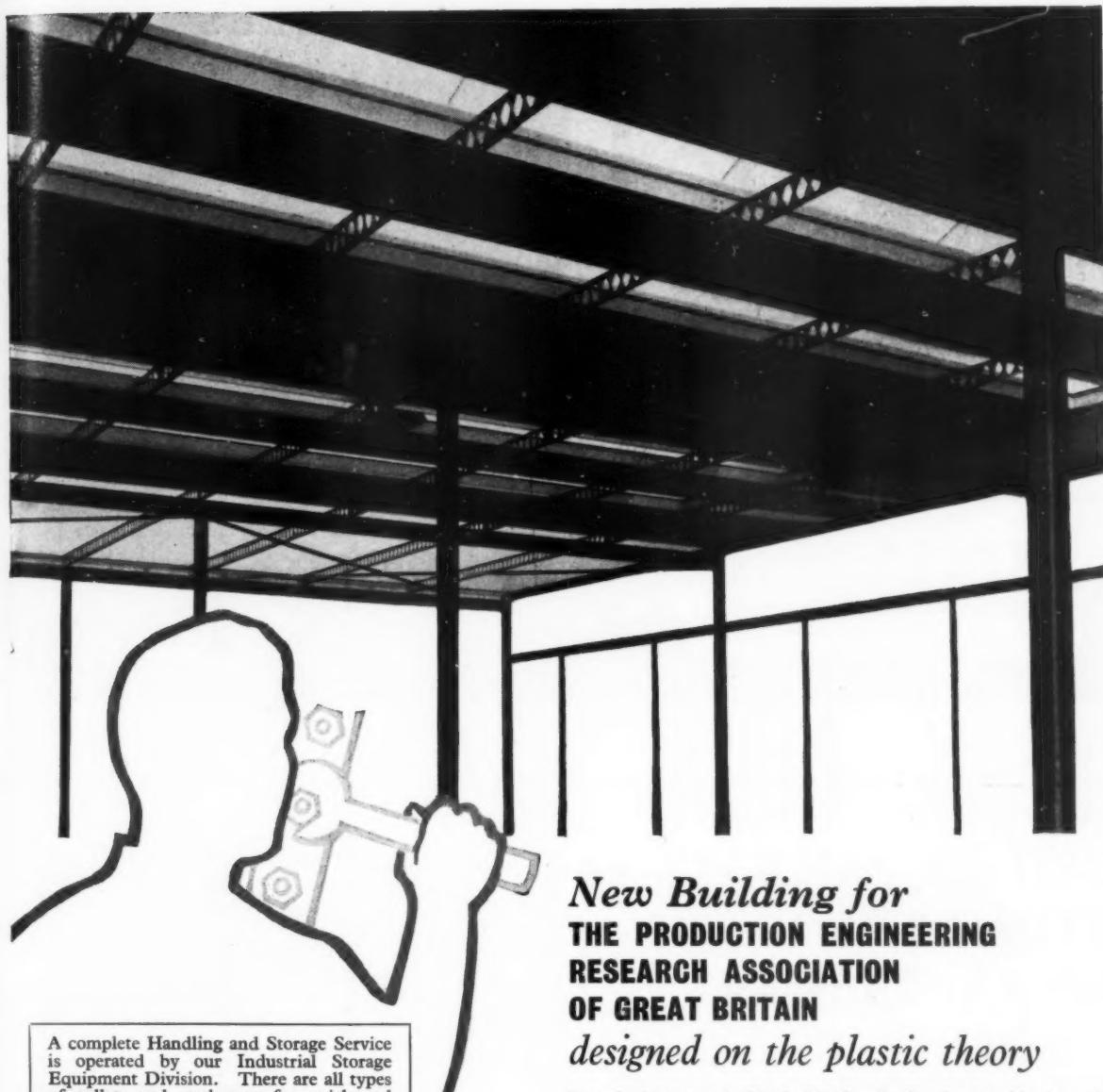


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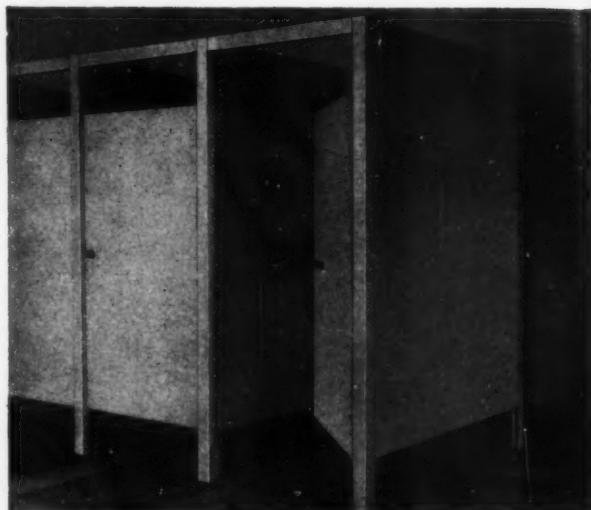
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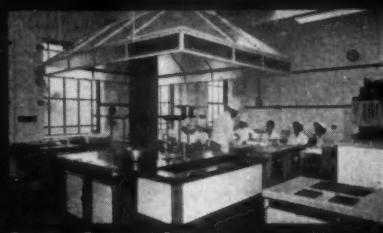
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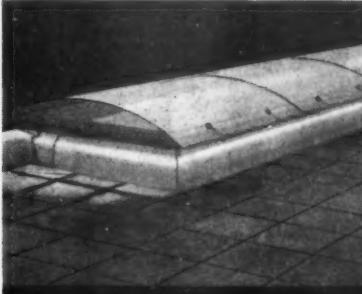
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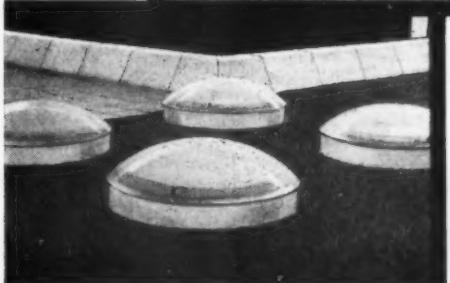
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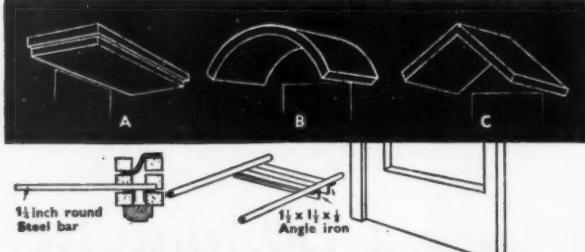
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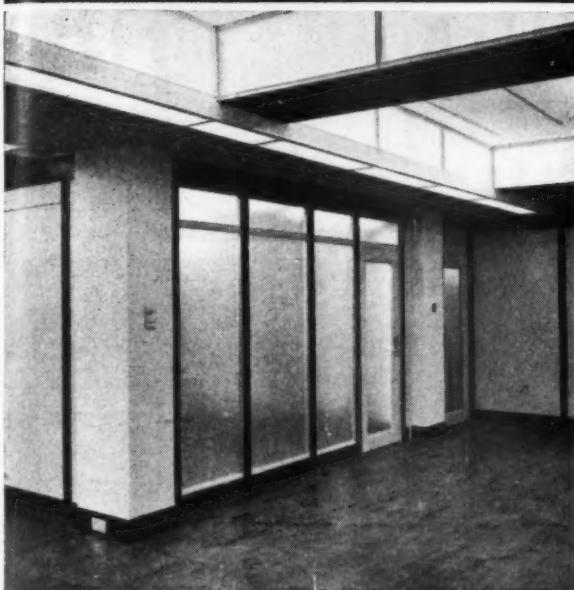
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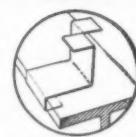
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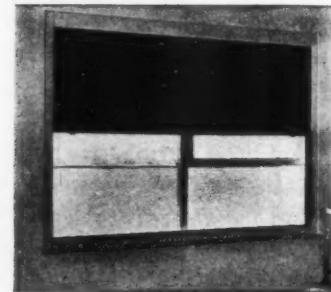
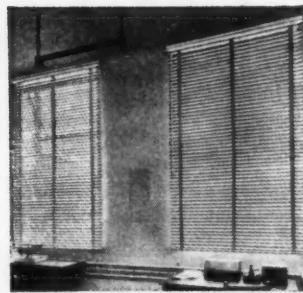
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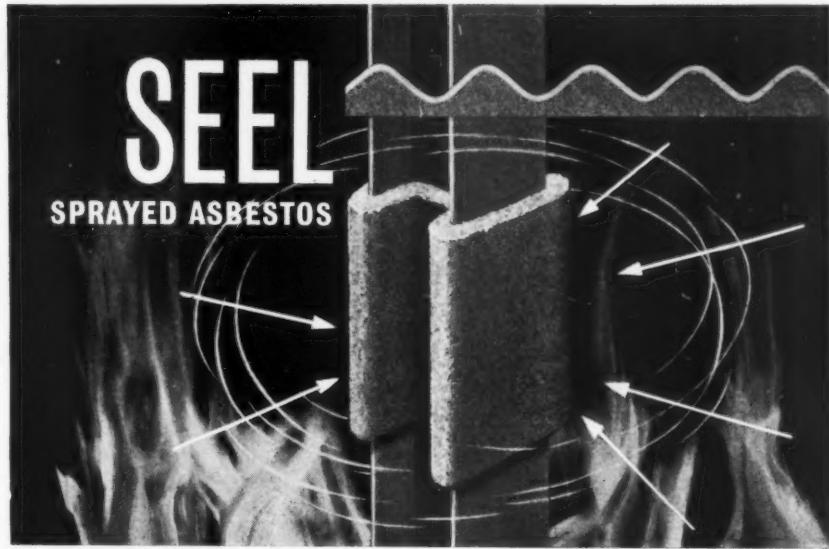
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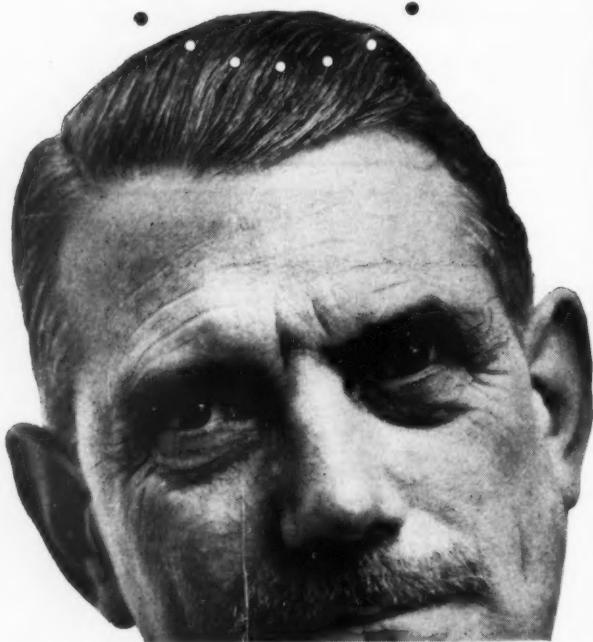
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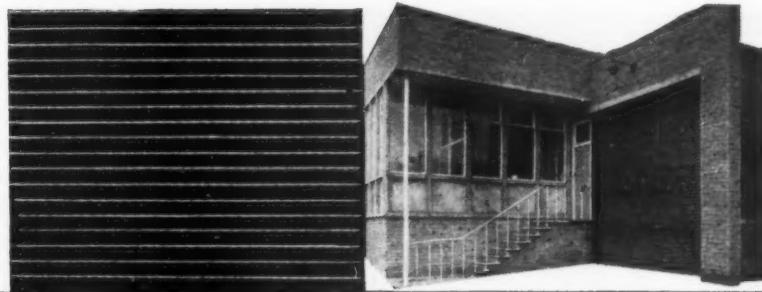
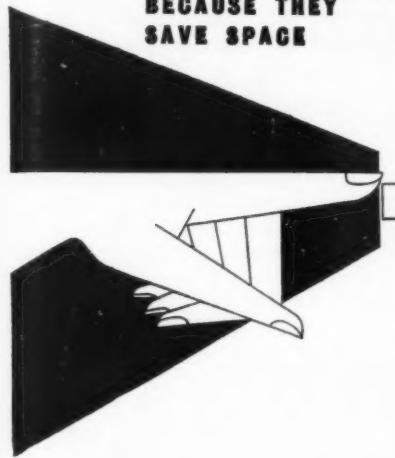
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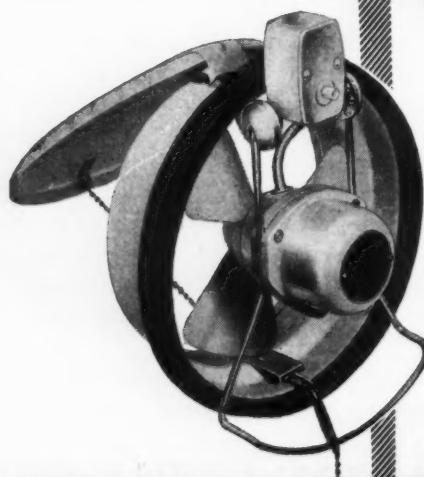
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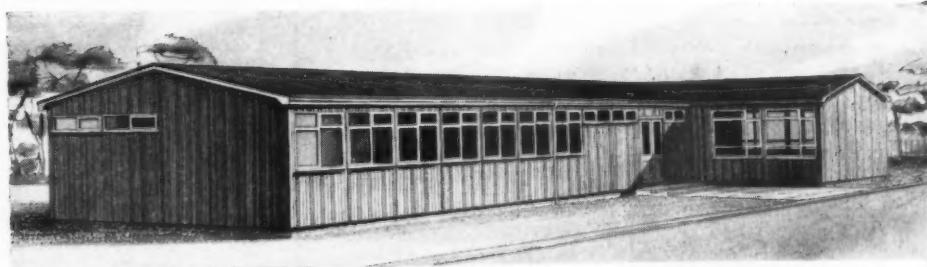
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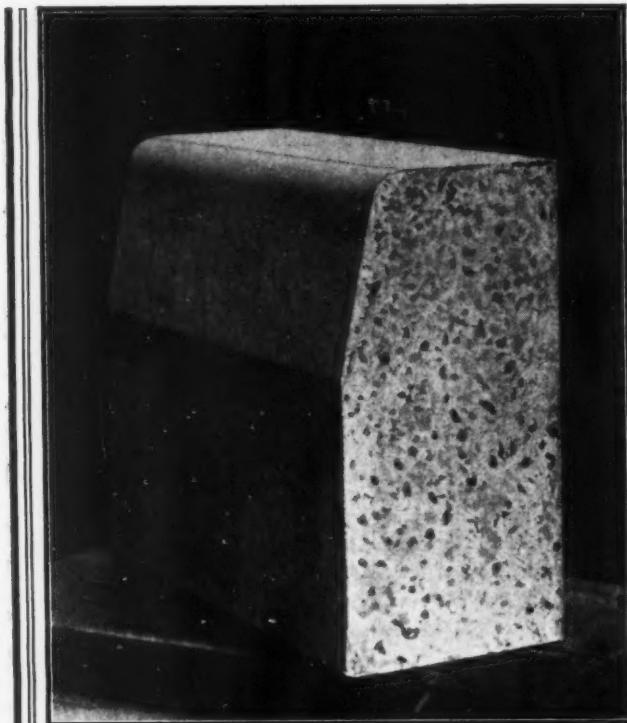
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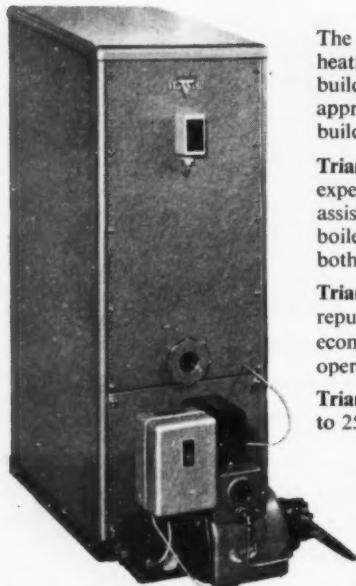
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Section	Description	Approx. Weight
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4" x 10" " "	3	18
6" x 12" " "	4	10
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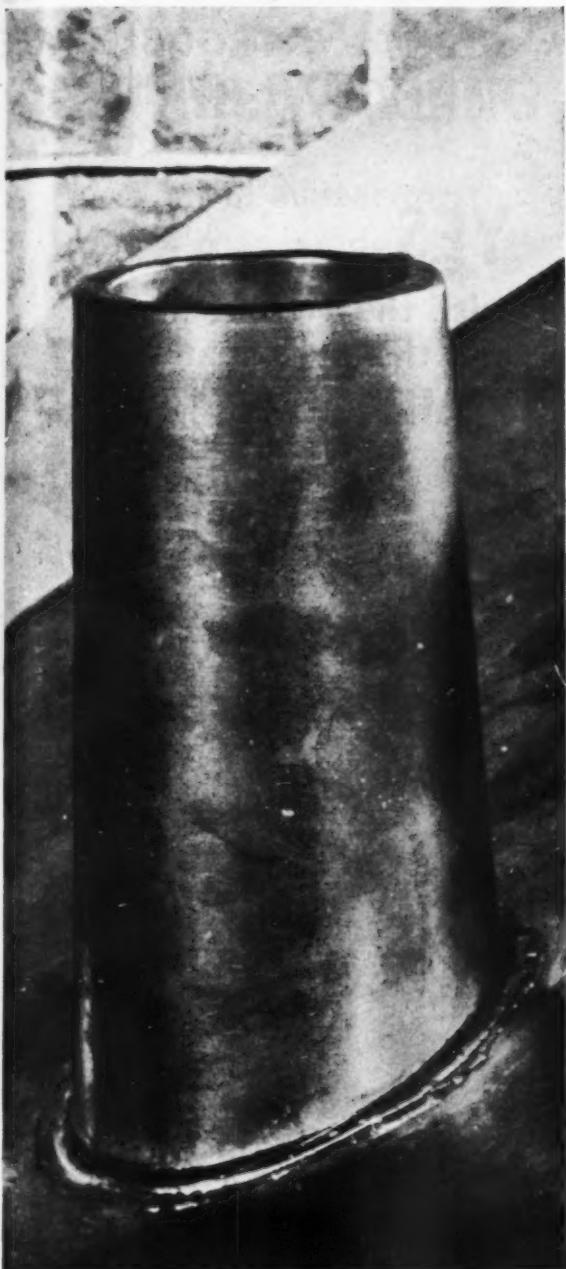
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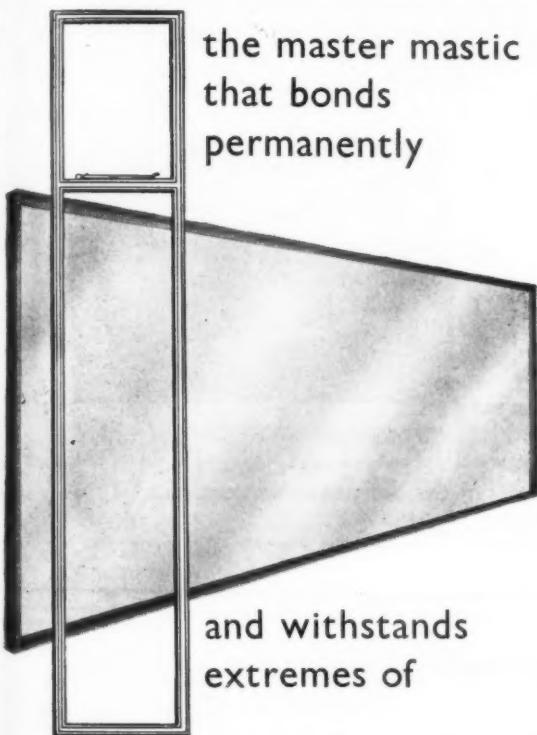
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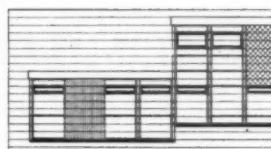
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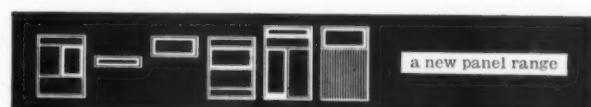
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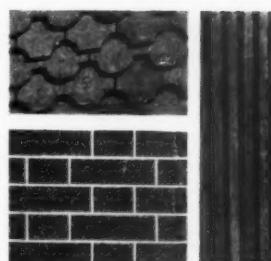


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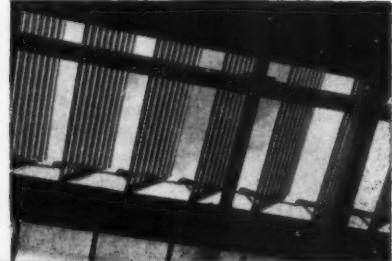
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ARCHITECTURAL ASSISTANTS

Vacancies exist at Pincher (Middlesex) and Portsmouth. Applicants must be competent Draughtsmen and will be required for work with Professional Architects on the preparation of designs for a wide range of new works, including new housing designs and estate layouts; all forms of accommodation; specialised technical buildings and industrial buildings in H.M. Dockyards. Preference given to candidates studying for professional qualifications.

Salary (National Rate) subject to slight variation dependent on location: starting from £550 p.a. (at age 21) to £760 p.a. (28 and over); maximum of scale—£975 p.a. Opportunities occur for promotion to leading grade—salary maximum £1,025 p.a. National Rate.

Five-day week. Annual leave 18 days rising to 22 after 10 years.

Consideration will be given to successful candidates being granted assistance to obtain professional or technical qualifications.

Candidates, who must be British subjects, are invited to apply in writing (giving details of experience), to Director General, Navy Works, Admiralty, Chamberlain Way, Pincher, Middlesex.

Interview will be arranged locally. 9861

HOSPITAL BUILDING PROGRAMME
REBUILDING OF ST. THOMAS'S HOSPITAL
ARCHITECTS

(a) SENIOR NATIONAL ARCHITECTS, salary scale £1,300 x £65 to £1,600 plus £50 London weighting.

(b) ASSISTANT ARCHITECTS, £905 x £35 (1) x £45 (6) x £50 (2) to £1,310 plus £40-£50 London weighting.

Opportunities occur for young, imaginative architects to assist in carrying out the design and construction of a complete new 800-bed teaching hospital. Working drawings for Stage 1 are now under way and planning studies for Stage 2 will be commencing shortly.

Applications for (a) should be qualified members of the R.I.B.A. with experience in preparing and supervising work on medium sized projects. For (b) preference will be given to qualified architects who have recently completed a full-time course at a recognised School of Architecture.

Previous hospital experience is not essential.

Applications should be returned to me within two weeks indicating post applied for and giving particulars of education, qualifications and experience, together with the names of two referees.

W. FOWLER HOWITT, A.R.I.B.A.,
Architect to the Board of Governors,
45, Lambeth Palace Road,
London, S.E.1. 1090

SALOP COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments to the established staff:—

(a) SENIOR ARCHITECTS, A.P.T. Grade V (£1,220-£1,375 p.a.). Applicants must be Associate R.I.B.A.

(b) ARCHITECTS, Special Grade (£785-£1,070 p.a.). Applicants must have passed the Final or Special Final Examination of the R.I.B.A. or equivalent at a School of Architecture.

(c) ASSISTANT ARCHITECTS, A.P.T. Grade II (£785-£880 p.a.). Applicants should have passed the Intermediate R.I.B.A. Examination. Opportunity for promotion when fully qualified.

Commencing salaries for posts (b) and (c) will depend on ability and experience. N.J.C. Conditions. Five-day week. A disturbance allowance or weekly separation allowance may be paid to married men taking up these appointments. Conditions of service and application forms obtainable from Ralph Crowe, A.A. Dipl., A.R.I.B.A., A.M.T.P.I., County Architect, Column House, London Road, Shrewsbury. Closing date 31st May, 1960. 1089

BOROUGH OF BEXLEY
ARCHITECTURAL DRAUGHTSMAN

Applications are invited for this appointment at a salary within Grade A.P.T. I (£610-£765 per annum) plus London weighting.

Applicants should be good draughtsmen and have a general knowledge of building construction and specification work.

Form of application and conditions of appointment are obtainable from Borough Engineer, West Lodge, Broadway, Bexleyheath, to whom completed applications must be returned by Monday, 30th May, 1960. Canvassing will disqualify.

ARTHUR GOLDFINCH,
Town Clerk.
1106

BOROUGH OF WILLESDEN

Applications are invited for the following permanent appointments:—

(a) ASSISTANT ARCHITECT within Grade A.P.T. IV (£1,065-£1,220 p.a.).

(b) ASSISTANT ARCHITECT within Special Grade (£785-£1,070 p.a.).

(c) ARCHITECTURAL ASSISTANT within Grade A.P.T. V (£765-£880 p.a.).

(d) ARCHITECTURAL ASSISTANT within Grade A.P.T. I (£610-£765 p.a.).

London weighting, maximum £30 p.a., is payable in addition to the above salaries.

Candidates for posts (a) and (b) must be Associates of the R.I.B.A. and should have a high ability in design, capable of supervising contracts and experience of multi-storey flats.

For one post experience of redevelopment schemes will be an advantage.

Candidates for posts (c) and (d) should have passed the Intermediate Examination of the R.I.B.A.

A programme of interesting and varied works is expected to continue for many years and opportunities are offered to imaginative designers with a contemporary and practical outlook.

The appointments will be superannuable and subject to the National Conditions of Service.

The Council is unable to assist with housing accommodation.

Forms of application and conditions of appointment may be obtained from the Borough Engineer & Surveyor, Town Hall, Dyne Road, Kilburn, N.W.6. Applications to be returned to the undersigned not later than 9 a.m. on Monday, 30th May, 1960.

R. S. FORSTER,
Town Clerk.
1056

UNIVERSITY OF OXFORD

Applications are invited for the following appointments:

(a) ASSISTANT ARCHITECT (commencing salary up to £1,200). Applicants must be qualified with several years' experience.

(b) ARCHITECTURAL ASSISTANTS (commencing salary up to £765). Applicants must be of Intermediate standard with several years' experience.

(c) ARCHITECTURAL ASSISTANTS (commencing salary up to £610). Applicants must have had several years' experience and be competent draughtsmen.

Only those keenly interested in progressive design need apply.

Write for further particulars and form of application to The Surveyor to the University, The Malthouse, Tidmarsh Lane, Oxford. 1005

CORPORATION OF GLASGOW
ARCHITECTURAL AND PLANNING
DEPARTMENT

A new planning team is being set up to study the planning problems of the City Centre involving the preparation of schemes for seven Major Comprehensive Development Areas and the Inner Ring Road—a four-mile-long Urban Motorway.

Applications are invited from enthusiastic qualified planners interested in the architectural, engineering or statistical aspects of the problems involved.

The work will provide scope for initiative in preparing details for schemes on which constructional work is intended to start as soon as possible.

Salary scale of £795 to £1,240 with placing according to experience. The salary scale is under immediate review.

Apply to City Architect and Planning Officer, 20, Trongate, Glasgow, C.1, giving details and names of referees.

DEVON COUNTY COUNCIL
COUNTY PLANNING DEPARTMENT

Applications are invited from suitably qualified persons for the following posts:—

1. PLANNING ASSISTANT SPECIAL SCALE (£785-£1,070).

The post is in the Eastern Divisional Office at Exeter. Applicants should be A.M.T.P.I. Persons having a degree in Geography or Economics and some experience in a Planning Department will be considered also.

The post is classified as an essential car user.

2. PLANNING ASSISTANT, A.P.T. I (£610-£765).

The post is at Headquarters in the Development Plan Section, which also deals with Redevelopment Schemes and other projects. Good draughtsmanship essential.

In approved cases, loans for house purchase and removal expenses are available, also lodging allowance of 50s. per week for married officers whilst seeking accommodation.

Forms of application, giving further details and returnable by Wednesday, 1st June, 1960, from:—County Planning Officer, "Bellair," Topsham Road, Exeter. 1039

BOROUGH OF TAUNTON
ASSISTANT ARCHITECT

Applications invited for appointment of two Assistant Architects in the Borough Architect's Department, Special Grade, Salary £785-£1,070 per annum.

Superannuable post, subject to medical examination, and to National Conditions of Service. Applications stating age, present position and salary, qualifications, experience and names of two referees to be sent to C. Bacon, F.R.I.B.A., Borough Architect, Flock House, Station Road, Taunton, by Monday, 30th May, 1960.

Consideration will be given to housing accommodation if required.

K. A. HORNE,
Town Clerk.
1128

CITY OF NOTTINGHAM

APPOINTMENT OF CITY ARCHITECT
The Corporation is considering the establishment of an Architectural Department and the appointment of a City Architect who will be responsible for the Corporation's Architectural and Building work.

Architects of experience are invited to apply. If an appointment is made it will be at a salary of £3,340 rising by one increment of £115 and two further increments of £110 to £3,675 per annum, and the gentleman appointed will be required to contribute to the Corporation's Superannuation Scheme and to pass a medical examination.

Applications accompanied by the names of three persons to whom reference can be made must be delivered to me not later than the last post on Monday the 13th June in an envelope endorsed "City Architect."

T. J. OWEN,
Town Clerk.

The Guildhall,
Nottingham.

1116

BOROUGH OF LEYTON

(in the County of Essex)
COMMITTEE FOR EDUCATION
APPOINTMENT OF ARCHITECTURAL
ASSISTANT

Applications are invited for the permanent appointment of Architectural Assistant, Grade A.P.T. II £765—£880 per annum, plus London Weighting. The successful applicant will be employed by the Essex County Council, and will work in the School Architect's Section of the Borough Engineer & Surveyor's Department, Town Hall, Leyton, E.10; five-day week is operated.

Details and forms of application from the Borough Education Officer, Education Offices, Kirkdale Road, Leytonstone, E.11 to whom they should be returned within 10 days from the appearance of this advertisement.

D. J. OSBORNE,
Town Clerk.

Town Hall,
Leyton, E.10.

1115

COUNTY BOROUGH OF SOUTH SHIELDS
ASSISTANT ARCHITECTS

Applications are invited for Assistant Architects in the Borough Engineer's Department. Salary will be in accordance with Grades A.P.T. I/SS (£610—£1,070). Placing within these grades will be in accordance with experience.

Housing accommodation may be made available to successful applicants if necessary.

The successful applicants will be required to pass a medical examination for superannuation purposes.

Application forms can be obtained from the Borough Engineer's Department, Town Hall, South Shields and should be returned by 10 a.m. on Thursday, 9th June, 1960.

R. S. YOUNG,
Town Clerk.

9991

CARDIGANSHIRE COUNTY COUNCIL

Would you enjoy a mild climate, good fishing, bathing and sailing, with the amenities of a University town and a National Library close at hand? Architects and Assistants who can accept these attractions should apply to the County Architect, County Hall, Aberaeron, Cardiganshire, for forms for posts in A.P.T. Special Grade and A.P.T. Grades I-II. Applications to be returned by 30th May, 1960.

J. E. R. CARSON,
Clerk of the County Council.

1033

BOROUGH OF ENFIELD:
BOROUGH ENGINEER & SURVEYOR'S
DEPARTMENT

APPOINTMENT OF
ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment at a salary in accordance with Grade A.P.T. II of the National Scheme of Conditions of Service (£765—£880 per annum) with the additional appropriate London weighting.

The commencing salary will be fixed at a point within the Scale commensurate with qualifications and experience.

Application forms obtainable from Mr. H. D. Peake, M.Sc.(Eng.), M.I.C.E., Borough Engineer & Surveyor, 7, Little Park Gardens, Enfield, Middx., should be returned to the undersigned by the 31st May, 1960.

CYRIL E. C. R. PLATTEN,
Town Clerk.

Public Offices,
Enfield, Middx.

1068

HAMPSHIRE COUNTY COUNCIL

HEAD OF MAINTENANCE SECTION. Scale E (£1,665—£1,885), for new pensionable appointment in County Architect's Department at Winchester. Commencing salary according to qualifications and experience. Candidates must be Corporate Members of the Royal Institution of Chartered Surveyors or other appropriate professional body. The successful candidate will be required to take charge of the Building Maintenance Section of the County Architect's Department and must have had considerable experience of all aspects of building and maintenance work.

Separation allowance and assistance with removal expenses in approved cases.

Applications, with age, qualifications, experience and names of two referees to Clerk of the County Council, The Castle, Winchester, by 6th June.

1258

SLough CORPORATION

APPOINTMENT OF ASSISTANT ARCHITECT

—GRADE A.P.T. IV

A MAJOR PROGRAMME OF NEW BUILDING WORK has recently been approved by the Council in connection with the general development of the Borough and a vacancy for an ASSISTANT ARCHITECT arises in consequence. The programme is a varied one, including in addition to normal housing development, twelve storey blocks of flats, factories, shops, and buildings for parks and other municipal functions.

The appointment will be for the duration of the programme which is estimated to be completed in three to four years. This vacancy is suited to an Architect who is particularly interested in the application of original thought to the design of buildings for a variety of functions and to whom contemporary architectural design appeals.

A five day week is in operation and a three-bedroom staff flat in pleasant rural surroundings a short distance outside the town may be made available to a suitable married candidate who desires living accommodation.

Qualified Architects who are interested in this vacancy are invited to write to the Borough Engineer, Town Hall, Slough, Bucks., giving brief details of their qualifications and experience. He will be pleased to send to them further details of the programme of design work, together with information, which would be of particular interest to those not familiar with Slough, in regard to the Department, the town and its surroundings.

COUNTY BOROUGH OF WOLVERHAMPTON
CHIEF PLANNING ASSISTANT

Applications are invited for this appointment on the staff of the Borough Engineer and Planning Officer. Salary grade A.P.T. V (£1,220—£1,375 per annum).

Superannuable post, medical examination, N.J.C. conditions of service.

Housing accommodation may be provided.

Candidates should be Corporate Members of the Town Planning Institute and must have wide experience in all aspects of Town and Country Planning.

Particulars of the appointment may be obtained from the Borough Engineer, Town Hall, Wolverhampton, to whom applications should be submitted by Friday, 3rd June.

BOROUGH OF NUNEATON
ARCHITECTURAL ASSISTANT

Applications are invited from suitably qualified persons for this position. Salary—Special Grade £785—£1,070.

The post is suitable for a recently qualified person and will provide scope and opportunity for a varied experience as the Borough Council have much architectural work in hand.

Further details and forms of application, which must be returned not later than the 4th June, 1960, may be obtained from me.

A. A. CRABTREE,
Town Clerk.

Council House,
Nuneaton.
May, 1960.

1274

COUNTY BOROUGH OF BRIGHTON
ASSISTANT ARCHITECTS

Applications are invited for the following appointments in the Borough Surveyor's Department:

(a) Assistant Architect Grade A.P.T. IV
 (£1,065—£1,220).

(b) Assistant Architect Grade A.P.T. III
 (£880—£1,065).

(c) Assistant Architect Special Grade
 (£785—£1,070).

Applicants must have passed the R.I.B.A. final examination or the special final examination.

(d) Assistant Architect Grade A.P.T. II
 (£765—£880).

(e) Assistant Architect Grade A.P.T. I
 (£610—£765).

Applicants must have passed the Intermediate Examination of the R.I.B.A.

In each case the commencing salary will be adjusted to suit the experience and qualifications of the successful candidate.

Application forms may be obtained from D. J. Howe, M.I.C.E., M.I.M.E., Borough Surveyor, Engineer & Planning Officer, and must be returned to him at 26/30, King's Road, Brighton, by noon on the 10th June, 1960.

W. O. DODD,
Town Clerk.

1272

ARCHITECTURAL ASSISTANTS
REQUIRED BY
MINISTRY OF WORKS

For employment in London and Provinces. Keen and enthusiastic assistants of Intermediate R.I.B.A. standard are required for the design of interesting and varied types of buildings in all parts of the world.

The salary range is from £570 (at age 21) to £900, London (slightly less elsewhere). Starting pay according to age and experience.

Five-day week. 32 weeks leave annually. Good prospects of promotion and permanency. Permanent posts are pensionable and the pension scheme is non-contributory.

Apply, giving details of age, training and experience, to:—E. Bedford, Esq., C.B., C.V.O., A.R.I.B.A., Chief Architect, Ministry of Works, Abell House, Room 427, John Islip Street, London, S.W.1. Interviews will be held at the above address and at Regional offices where possible.

STAFFORDSHIRE COUNTY COUNCIL
COUNTY PLANNING AND DEVELOPMENT
DEPARTMENT

Applications are invited for the appointment of a SENIOR PLANNING ASSISTANT on A.P.T. Grade V (£1,220—£1,375 per annum).

Applicants must be corporate members of the Town Planning Institute and in addition a University Degree or a recognised qualification in architecture, engineering or surveying would be an advantage.

The person appointed will be required to act as Deputy to the Area Planning Officer who is responsible for the control of development in the area and for assistance in the preparation of development and redevelopment schemes.

The Council are prepared to grant lodgings allowances of 35/- per week for a period of six months and second class railway travel home every two months during the initial six months to married applicants maintaining a home outside the geographical County. Consideration will also be given to the granting of financial assistance in appropriate cases towards removal expenses.

Applications giving details of age, education, qualifications, present and previous appointments, experience and the names of two persons to whom reference may be made should be sent to D. W. Riley, County Planning and Development Officer, 41a, Eastgate Street, Stafford, not later than 1st June, 1960.

Relationship to any member or senior officer of the County Council must be disclosed. Canvassing will disqualify.

T. H. EVANS,
Clerk of the County Council.
1271

CITY AND COUNTY OF NEWCASTLE UPON
TYNE
APPOINTMENT OF DEPUTY CITY
ARCHITECT

Applications are invited for the appointment of DEPUTY CITY ARCHITECT at a salary of £1,953 6s. 2d. per annum, rising by three annual increments to a maximum of £2,176 13s. 4d. per annum.

Applicants must be Members of the Royal Institute of British Architects, and should have had wide experience of the architectural work of a Local Authority, including Housing, Educational and other Public Buildings.

The appointment will be subject to the National Conditions of Service as adopted by the City Council, to the provisions of the Local Government Superannuation Acts, 1937-1953, and to three months' notice on either side. The successful candidate will be required to pass a medical examination.

Application forms and full particulars may be obtained from George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle upon Tyne, 1, to whom they must be returned, endorsed "Deputy City Architect," or before MONDAY, 20th JUNE, 1960.

Canvassing in any form will be a disqualification.

JOHN ATKINSON,
Town Clerk.

Town Hall, Newcastle upon Tyne, 1.
12th May, 1960.

EASTERN ELECTRICITY BOARD
NORTHMET SUB-AREA

Applications are invited for the following appointments. The successful candidates will be required to contribute to a superannuation scheme, and may be required to undergo a medical examination.

SUB-AREA HEADQUARTERS, LONDON, N.14.
Civil Engineering and Building Section.

TWO GENERAL ASSISTANT ENGINEERS

(Ref.: 957) 96/60.R.

Candidates should have had a good general and technical education, possess a sound knowledge of practical building and civil engineering construction, and be capable of setting out and supervising site works.

Salary: N.J.B. Grade 16 (£215—£260)
plus London Allowance.

TWO ENGINEERING DRAUGHTSMEN

(Ref.: 958) 95/60.R.

Candidates should have had a good technical training and experience in the preparation of plans and detailed drawings of buildings and civil engineering works, including Substations, Service Centres, Workshops and Offices. Possession of the O.N.C. (Building) or an equivalent qualification will be an advantage.

Salary: N.J.B. Schedule D, Grade 6 (£260—£274)
plus London Allowance.

For these appointments, apply by letter to The Manager, Eastern Electricity Board, Northmet Sub-Area, Northmet House, Southgate, London, N.14, by the 27th May, 1960.

CHESHIRE COUNTY ARCHITECT'S
DEPARTMENT

APPOINTMENT OF CHIEF ASSISTANT TO
DISTRICT ARCHITECT FOR CHESTER AREA

Applications are invited, on forms obtainable from me, for the above appointment in Grade A.P.T. III (£880—£1,065) in my district office at Chester. The person appointed will act as Chief Architectural Assistant to the District Architect and will deputise for him when necessary at Committees, etc. Applicants should be qualified.

EDGAR TABERNER, A.R.I.B.A.,
County Architect.

County Hall,
Chester.
May, 1960.

1139



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ARCHITECT/SURVEYOR

required by

LARGE MULTIPLE SHOE RETAILERS

Applicant must be fully qualified to design and supervise installation of Shop Fronts, Structural Alterations and Repairs.

Apply in confidence, giving full details of age, experience and salary required, to the Managing Director,

GREENLEES & SONS ("EASIEPHIT" FOOTWEAR) LTD.,
EAST PARK ROAD, LEICESTER.

THE ARCHITECTS' JOURNAL for May 19, 1960

NORTH EAST METROPOLITAN REGIONAL HOSPITAL BOARD

40, EASTBOURNE TERRACE, LONDON, W.2
W. G. PLANT, DIP. ARCH. (LPOOL), F.R.I.B.A.
REGIONAL ARCHITECT

The Board are engaged in an expanding programme of Hospital Development and the mentioned appointments offer exceptional opportunities of gaining experience in a wide, varied and interesting field.

Posts are pensionable and prospects of advancement are good. Previous Hospital experience is not essential.

(1) PRINCIPAL ASSISTANT QUANTITY SURVEYOR, SCALE I.

Salary commencing at £1,815, rising to £2,185. Applicants must be Corporate Members of the Royal Institute of Chartered Surveyors (Sub. Div. III Quantities) or, in certain circumstances, Associate Members of the Institute of Quantity Surveyors.

The Architect's Department includes a quantity surveying section having a staff of approximately 16, and the Board also make use of the services of Quantity Surveyors in private practice. The Officer appointed will be directly responsible to the Regional Architect for the Board's quantity surveying work, including co-operation with and instruction of private quantity surveyors. Applicants should have experience of estimating, preparation of bills of quantities, final accounts and all matters relating to building contract procedure. Only candidates with wide experience in all aspects of quantity surveying and contract procedure need apply.

(2) ASSISTANT QUANTITY SURVEYORS.

Salary £945—£1,360 per annum. Candidates must be Corporate Members of the Royal Institute of Chartered Surveyors (Sub. Div. III Quantities) or, in certain circumstances, Associate Members of the Institute of Quantity Surveyors. Those appointed will be required to undertake site measurement, taking off and estimating (all under supervision), working up and final accounts.

(3) PRINCIPAL ASSISTANT ARCHITECT, SCALE II.

Salary commencing at £1,715 per annum, rising to £2,085.

The Board employ a large staff of Architects and, in addition, make use of the services of Architects in private practice, and the Officer appointed to this post will be required to collaborate with and, to some extent, control the work of private Architects in the design and execution of Hospital building projects. Applicants must be registered Architects, having passed the requisite examinations, and must be good designers having wide experience of all aspects of contract procedure and be capable of discussing substantial projects with Principals of firms of private Architects.

(4) ARCHITECTURAL ASSISTANTS.

Salary £645—£940. Applicants must have passed the Intermediate Examination of the Royal Institute of British Architects or an examination giving exemption therefrom. They must be good draftsmen and interested in design.

Applications, giving age, present salary, qualifications and experience (with dates), together with the names of three referees to the Secretary, North East Metropolitan Regional Hospital Board, 40, Eastbourne Terrace, W.2, within 14 days.

LONDON COUNTY COUNCIL HAMMERSMITH COLLEGE OF ART AND BUILDING

Required as soon as possible, LECTURER AND STUDIO INSTRUCTOR IN ARCHITECTURE. Should be member of R.I.B.A. and preferably hold degree or diploma of a Recognised School of Architecture.

Salary: £1,370 x £35—£1,550 plus London Allowance of £38 or £51.

Further particulars and application form from Secretary at the College, Lime Grove, W.12, to be returned within 14 days. (1182) 1164

BOROUGH OF DAGENHAM APPOINTMENT OF SENIOR ASSISTANT ARCHITECT

Applications are invited from Associates R.I.B.A. for the post of SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV (£1,065—£1,220, plus £45 London weighting), in the Borough Engineer and Surveyor's Department.

Housing accommodation may be made available.

Application forms and conditions of appointment on application to Borough Engineer and Surveyor, to whom they should be returned by Thursday, 26th May, 1960.

KEITH LAUDER,
TOWN CLERK.

Civic Centre,
Dagenham. 1175

COUNTY BOROUGH OF BOLTON BOROUGH ARCHITECT'S DEPARTMENT

Applications invited for an ASSISTANT HEATING ENGINEER within Grade A.P.T. II (£765—£880). Knowledge of Heating, Ventilating, D.H.W., Gas and Cold Water services. Able to design installations under supervision. Post superannuable, subject to medical examination.

Applications, giving full details, including experience, present post and salary, and naming two referees should be received by me not later than 26th May.

PHILIP S. RENNISON,
TOWN CLERK. 1176

WARRICKSHIRE COUNTY COUNCIL ARCHITECT'S DEPARTMENT

(a) DEPUTY GROUP ARCHITECT, GRADE A.P.T. IV-V (£1,065—£1,375).

Applications are invited from qualified and experienced architects for this post, which is one of the groups handling projects for the Council's major building programme.

The post is one of responsibility requiring a high degree of initiative and design ability in up-to-date forms of construction, materials, costs, job planning and organisation.

The successful applicant will also be expected to deputise generally for the group architect.

(b) ARCHITECTS, SPECIAL GRADE (£785—£1,070).

Applications are invited from architects who have passed Part I and II of the R.I.B.A. Final or Special Examination or their equivalent at one of the recognised schools of architecture. The successful applicants will work in groups on large projects, and an opportunity will be given to men with enthusiasm and ability to design and carry out projects under a group architect.

(c) ARCHITECTURAL ASSISTANTS, GRADE A.P.T. II (£765—£880).

Vacancies exist for assistants who are up to Intermediate R.I.B.A. standard and who require experience in a variety of interesting projects.

The commencing salary can be within the grade according to ability and experience. The Council have schemes for the payment of removal expenses and a lodging allowance to married officers.

Application forms and full conditions applicable to the appointments can be obtained from Eric Davies, F.R.I.B.A., A.M.P.T.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
May, 1960. 1177

STEVENAGE DEVELOPMENT CORPORATION CHIEF ARCHITECT'S DEPARTMENT

Applications are invited for appointment to a post as ASSISTANT ARCHITECT on New Towns Salary Grade A.P.T. IV—£1,065/£1,220 p.a. Starting salary according to qualifications and experience.

Applicants should be Associates of the Royal Institute of British Architects and have experience of the design and construction of modern buildings. The successful candidate will be engaged on varied and interesting work relating to the building of a New Town including Shopping Centres, Housing and Multi-storey Flats, Office Blocks and Industrial Buildings.

Housing accommodation will be available in due course in an appropriate case.

Applications, giving full details of experience and the names of two referees, to be sent to the Chief Administrative Officer, Aston House, nr. Stevenage, Herts., by first post on Monday, 30th May, 1960. 1148

WEST SUFFOLK COUNTY COUNCIL

Applications are invited for:

(1) ARCHITECTURAL ASSISTANT, Grade A.P.T. III (£880—£1,065) or Special Grade (£785—£1,070) according to qualifications and experience.

The County Council may be able to assist with housing accommodation.

(2) TEMPORARY CLERK OF WORKS.

Application forms and further particulars should be obtained from L. C. Jagger, F.R.I.B.A., County Architect, 4, Castle Street, Worcester.

not later than 2nd June, 1960. (Z139) 1265

BOROUGH OF ACTON

BOROUGH ENGINEER'S DEPARTMENT Applications are invited for the following permanent appointments:

ENGINEERING ASSISTANT, Special Grade, ENGINEERING ASSISTANTS (2), A.P.T. I/II, Special Grade.

ARCHITECTURAL ASSISTANT, A.P.T. Grade IV.

ARCHITECTURAL ASSISTANT, Special Grade.

ARCHITECTURAL ASSISTANT, A.P.T. I/II, JUNIOR ARCHITECTURAL ASSISTANT, A.P.T. I.

Successful candidates will be engaged on general municipal works and on multi-storey housing development and conversion of properties. Applicants should have passed appropriate sections of the I.C.E.; I.Mun.E.; R.I.B.A.; or R.I.C.S. examinations.

Starting salaries will be according to age, qualifications and experience. London allowance (max. £45 p.a.) is payable in addition. The Council operates a five-day week.

Conditions of appointment and forms of application may be obtained from and should be returned to the Borough Engineer, Town Hall, Acton, W.3, by 30th May, 1960. 1156

ANTRIM COUNTY COUNCIL PLANNING ASSISTANT

Applications are invited from holders of a qualification in planning and/or architecture for the position of Planning Assistant in the Council's Planning Department.

Salary Scale: A.P.T. Grade IV, £1,065—£1,220, subject to deductions under the Local Government Superannuation Act (N.I.) 1950.

The position is unestablished, but, so far as can be seen, will last for several years.

Applications, together with the names and addresses of two referees, must be delivered to the Secretary, County Courthouse, Crumlin Road, Belfast, 14, not later than 18th June, 1960. 1152

COUNTY BOROUGH OF DONCASTER

Applications are invited for the post of ARCHITECTURAL ASSISTANT in the Borough Architect's Department at a salary in accordance with A.P.T. I (£610—£765).

Applicants must have passed the R.I.B.A. Intermediate examination. The appointment is subject to one month's notice on either side and is superannuable subject to the successful applicant passing a medical examination.

Application forms obtainable from the Borough Architect, 15, South Parade, Doncaster, to whom they must be returned by the 30th May, 1960.

H. R. WORMALL,
TOWN CLERK. 1180

5th May, 1960.

COUNTY BOROUGH OF ST. HELENS BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the following appointments in the Architectural Section of the Department:

(a) PRINCIPAL ASSISTANT ARCHITECT, Grade A.P.T. V (£1,220/£1,375).

(b) ARCHITECTURAL ASSISTANT, Grade A.P.T. II/III (£765/£1,065).

Applicants for appointment (a) should be qualified Architects with good experience in general Municipal development.

The Council operates a five-day working week.

The appointments will be terminable by one month's notice and will be subject to the Local Government Superannuation Acts, Medical Examination and N.J.C. conditions of service.

Applications, stating age, qualifications, present and past appointments, and details of experience, giving names of two referees and clearly indicating the appointment applied for, must be forwarded to the undersigned not later than Monday, 30th May, 1960.

Applicants must reveal relationship to any member or senior officer of the Council. Canvassing will disqualify.

M. WARD,
M. J. MUNNE, M. T. P. I., A. M. I. S. T. R. U. C. T. U. E.,
Borough Engineer. 1225

Town Hall,
St. Helens.

NEWCASTLE REGIONAL HOSPITAL BOARD

Regional Architect: P. H. KNIGHTON, M.B.E., A.R.I.B.A.

HOSPITAL EXPANSION PROGRAMME APPOINTMENT OF ASSISTANT REGIONAL ARCHITECT

In connection with a considerable number of major projects to be carried out as part of the Hospital Expansion Programme, the Board invites applications for the post (superannuable) of ASSISTANT REGIONAL ARCHITECT at the salary scale of £1,825—£2,175.

Applicants must be Registered Architects, having passed the requisite examinations, should be particularly well versed in the design and execution of major building projects and the control of staff.

Previous hospital experience is not essential as it is hoped that the successful applicant will be able to attend a post-graduate course to be held at the R.I.B.A., early in July, and possibly a further course later in the year.

Applications, stating age, qualifications, past and present appointments, present salary and details of experience and training, together with the names of three referees (of whom at least two should be architects), should be forwarded to the Secretary of the Board, Benfield Road, Newcastle upon Tyne, 6, not later than the 25th May, 1960. 1232

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COUNTY OF ESSEX
BOROUGH OF WALTHAMSTOW
COMMITTEE FOR EDUCATION

ASSISTANT BUILDING SURVEYOR, within
A.P.T. Grade II, £765-£880 per annum plus
London weighting.

Applicants should hold the R.I.B.A. Building
Surveyors Diploma or have passed Intermediate
R.I.C.S. (Building Section), and have had ex-
perience in preparing reports, estimates, speci-
fications and supervising repair and maintenance
of buildings.

The building programme includes a number
of new schools, extensions to and major
remodelling of existing schools.

The Council will make up to 100 per cent.
advance to the successful applicant for house
purchase in this or adjoining boroughs.

Forms of application to be obtained from and
returned to the Borough Education Officer, Town
Hall, Forest Road, Walthamstow, E.17, within
two weeks of the appearance of this notice.

1220

BOROUGH OF SOLIHULL
APPOINTMENT OF ARCHITECTURAL
ASSISTANTS

Applications are invited from Architects with
suitable qualifications and experience for the
under-mentioned appointments:

(a) SENIOR ASSISTANT ARCHITECT—A.P.T.
Grade V (£1,220-£1,375 per annum).

(b) ASSISTANT ARCHITECT—A.P.T. Grade
II (£765-£880 per annum).

The Borough which has a population of
approximately 90,000 and which is still expanding
rapidly is an excepted district for education
and has been recommended for County Borough
status by the Local Government Commission for
England. There is a considerable programme of
varied capital works to be undertaken in the
very near future.

The appointments will be subject to satisfactory
medical reports, the Local Government
superannuation Acts, the National Scheme of
Conditions of Service and to one month's notice
in writing on either side.

In appropriate cases the Council will assist in
the provision of housing accommodation and
half removal expenses will be paid.

Applications, giving full particulars as to age,
qualifications and past and present experience,
together with the names and addresses of two
referees, should be submitted to the Borough
Surveyor, 90, Station Road, Solihull, not later
than 31st May, 1960.

W. MAURICE MELL,
Town Clerk.

The Council House,
Solihull,
Warks.

1223

COUNTY BOROUGH OF DERBY
BOROUGH ARCHITECT'S DEPARTMENT

(a) SENIOR ASSISTANT ARCHITECT, A.P.T.
Grade IV (£1,065-£1,220 per annum). Qualifi-
cations: A.R.I.B.A.

(b) SENIOR ASSISTANT ARCHITECT, Special
Grade (£785-£1,070 per annum). Qualifi-
cations: A.R.I.B.A.

(c) JUNIOR ARCHITECT, General Division
 (£210-£595 per annum). Qualifications: Pro-
fessional R.I.B.A.

(d) ASSISTANT ARCHITECT, A.P.T. Grade I
 (£610-£765 per annum). Qualifications:
 Intermediate R.I.B.A.

(e) SENIOR QUANTITY SURVEYOR, A.P.T.
Grade III/IV (£895-£1,220 per annum). Qualifi-
cations: A.R.I.C.S. (Quantities) or
A.I.Q.S. or A.I.S.S. with appropriate experi-
ence.

(f) JUNIOR QUANTITY SURVEYOR, General
Division (£210-£595 per annum). Qualifications:
 Student member R.I.C.S. with previous
experience in Quantity Surveyor's Office.

(g) ASSISTANT QUANTITY SURVEYOR,
A.P.T. Grade I (£610-£765 per annum). Qualifications:
 Intermediate R.I.C.S. with
good experience in working up Bills of
Quantities and Final Accounts, measuring on
site and taking off for small works.

Commencing salary according to qualifications
and experience. Permanent superannuable
appointments, subject to one month's notice and
to medical examination. National Conditions of
service.

Forms of application obtainable from and to
be returned to the Borough Architect, The
Council House, Corporation Street, Derby, not
later than Wednesday, 8th June, 1960.

G. H. EMLYN JONES,
Town Clerk.

10th May, 1960.

1224

METROPOLITAN BOROUGH OF HACKNEY
ASSISTANT ARCHITECT OR ARCHITECTURAL
ASSISTANT

ENGINEER AND SURVEYOR'S DEPARTMENT
Candidates must have passed the Final or
Intermediate Examination of the R.I.B.A. and
will be made as Assistant Architect in
A.P.T. IV (£1,065-£1,220) or as Architectural
Assistant in A.P.T. II (£765-£880), A.P.T. III (£880-
£1,065) or Special Grade (£785-£1,070) per annum
according to qualifications and experience.

In all cases appropriate London Weighting
allowance is payable in addition, and commencing
salaries will be according to training, qualifica-
tions and experience. Staff Canteen, alternate
Saturdays, post-entry educational training
facilities.

Application forms obtainable from the Town
Clerk, Town Hall, Hackney, E.8, returnable by
9 a.m., 7th June, 1960.

1241

COUNTY BOROUGH OF SWANSEA
BOROUGH ARCHITECT'S DEPARTMENT
APPLICATIONS are invited for the following
posts:

(a) QUANTITY SURVEYING ASSISTANT—
Salary Grade A.P.T. I (£610-£765).

Applicants must have passed the INTER-
MEDIATE EXAMINATION of the Royal
Institution of Chartered Surveyors (Quantities
Sub-Division).

(b) QUANTITY SURVEYING ASSISTANT—
Salary Grade Clerical 1 (£595-£670).

Applicants must have passed the FIRST
PROFESSIONAL Examination of the Royal
Institution of Chartered Surveyors.

Applicants for both posts must have had ex-
perience in squaring, abstracting,
billing and measurement of works on site.

The commencing salary in each case will be
within the grade according to ability and
experience.

Candidates must be under 45 years of age unless
in Local Government Service.

The appointments will be subject to the pro-
visions of the Local Government Superannuation
Act, and may be terminated by one month's
notice on either side. Successful applicants will
be required to pass a medical examination.

Forms of Application may be obtained from
the Borough Architect, The Guildhall, Swansea,
to whom they must be returned not later than
FRIDAY, 3RD JUNE, 1960.

Canvassing disqualifies.

T. B. BOWEN,
Town Clerk.

The Guildhall,
Swansea.

1235

COUNTY BOROUGH OF SOUTHAMPTON
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT

Applications are invited for the following
appointments:

(a) ASSISTANT ARCHITECT, Grade A.P.T. IV
£1,065/£1,220. Applicants must hold the qualifi-
cation A.R.I.B.A. and have had wide experi-
ence in housing design and construction,
including multi-storey flats and shopping
centres, in connection with redevelopment
schemes in urban areas.

(b) ASSISTANT ARCHITECT within the grading
for Special Classes of Officers (£785/£1,070)
according to experience and qualifications (a
commencing salary of £950 is envisaged).
Applicants must have passed Parts I and II
of the R.I.B.A. final examination and have
had experience in housing design and
construction and estate layout.

(c) ARCHITECTURAL ASSISTANT, Grade
A.P.T. II (£765-£880). Applicants are required
to have passed the intermediate R.I.B.A.
examination or its equivalent at one of the
recognised schools of architecture, and prefer-
ably have had experience in local government
housing.

(d) ASSISTANT QUANTITY SURVEYOR, Grade
A.P.T. IV £1,065/£1,220. Applicants must be
fully qualified chartered quantity surveyors,
preferably with wide experience in municipal
housing, including multi-storey flats and shop-
ping centres.

The appointments are subject to N.J.C. con-
ditions of service.

Housing accommodation available in approved
cases and approved removal expenses reimburs-
able up to a maximum of £50.

Apply on application forms obtainable from
the Borough Engineer and Surveyor, Civic Centre,
Southampton, returnable by Tuesday, 7th June,
1960.

1234

EAST RIDING OF YORKSHIRE COUNTY
COUNCIL

Applications are invited for the appointment of
ASSISTANT ARCHITECTS on the staff of the
County Architect.

The salary will be in accordance with the
N.J.C. Special Scale (£785 to £1,070 per annum).

Applications, giving particulars of qualifi-
cations, experience, age, past and present appoint-
ments with salaries, together with the names of
three referees, should be sent to the County
Architect, County Hall, Beverley, not later than
Friday, 27th May, 1960.

Assistance towards removal, lodgings and
travelling expenses may be granted.

THOMAS STEPHENSON,
Clerk of the Council.

1159

ASSISTANT ARCHITECTS
REQUIRED BY
MINISTRY OF WORKS

For employment in London, Leeds and Cardiff.
GENERAL CONDITIONS

Salary range between £305 (at age 25) and
£1,260 per annum in Leeds and Cardiff, slightly
more in London.

Starting point according to age, qualifications
and experience. 5-day week. Annual leave
4 weeks and 2 days initially. Prospects of pro-
motion and opportunities for permanent and
pensionable posts.

QUALIFICATIONS

Candidates must be Registered Architects by
examination or Registered Architects who, since
registration, have passed a professional examination
in Architecture recognised by the Architects
Registration Council of the United Kingdom.
They must also possess good professional experi-
ence.

APPLICATIONS

State age and give full details of training and
experience to Mr. E. Bedford, C.B., C.V.O.
A.R.I.B.A., Chief Architect, Ministry of Works
(F), Room 427, Abell House, John Islip Street,
London, S.W.1.

1256

NORTH EAST METROPOLITAN REGIONAL
HOSPITAL BOARD

40, Eastbourne Terrace, London, W.2

HOSPITAL PLANNING & DEVELOPMENT
The Board are substantially increasing their
Professional and Technical staff to deal with the
rapidly expanding Hospital Building Programme,
and

ARCHITECTS

and

QUANTITY SURVEYORS

are invited to apply for the undermentioned
posts, which offer exceptional opportunities for
gaining experience in the field of Hospital Plan-
ning and Development. Previous Hospital
experience is not essential.

ARCHITECTS

SENIOR ASSISTANTS: Salary £1,350-£1,650.
Applicants must be Registered Architects having
passed the requisite examinations.

ASSISTANTS: Salary £945-£1,360. Applicants
must be Registered Architects having passed
the requisite examinations.

ARCHITECTURAL ASSISTANTS: Salary £645-
£940. Applicants must have passed the Intermediate
examination of the Royal Institute of
British Architects, or an examination giving
exemption therefrom.

QUANTITY SURVEYORS

CHIEF QUANTITY SURVEYOR—PRINCIPAL
ASSISTANT SCALE I: Salary from £1,815-
£2,185.

ASSISTANTS: Salary £945-£1,360. Applicants
should be Corporate Members of Royal Institu-
tion of Chartered Surveyors (sub. Div. III
Quantities) or in certain circumstances Asso-
ciates of Institute of Quantity Surveyors.

SURVEYING ASSISTANTS: Salary £645-£940.
Applicants must have passed the Intermediate
examination of the Royal Institution of
Chartered Surveyors.

The posts are pensionable, with good prospects
of promotion.

Applications giving age, present salary, qualifi-
cations and experience (with dates), together
with the names of two referees, should be sent
to The Secretary, North East Metropolitan
Regional Hospital Board, 40, Eastbourne Terrace,
W.2, within 14 days.

WIDNES CORPORATION

BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of
SENIOR ARCHITECT, Grade A.P.T. V (£1,220-
£1,375). The duties of the post will include work
in connection with a varied Housing, Education
and general programme, including a College of
Further Education, Secondary Grammar and
Modern Schools, Municipal Offices, and Civic
Centre.

Five-day week, housing accommodation to
rent or lodging allowance in lieu for married
applicants; removal expenses in full; Super-
annuation Scheme. Candidates must be associate
members of the R.I.B.A. and suitably experi-
enced.

Applications, quoting two referees, by 6th June,
1960, to Borough Architect, Brendan House,
Widnes.

FRANK HOWARTH,
Town Clerk.

Town Hall,
Widnes.

10th May, 1960.

1215

ELSTREE RURAL DISTRICT COUNCIL
APPOINTMENT OF TEMPORARY
ARCHITECTURAL ASSISTANT

Applications are invited for the above tem-
porary appointment in the Department of the
Engineer & Surveyor, for a period of not less
than two years, on work in connection with the
design and erection of a proposed Public Hall,
Covered Swimming Pool and other Civic Centre
buildings.

Salary within Special Grade £785 to £1,070 per
annum (plus London weighting—maximum £45);
commencing salary to be determined according
to experience.

Candidates should have passed the Final
Examination of the R.I.B.A. or equivalent.

The appointment will be subject to the
National Scheme of Conditions of Service: the
provisions of the Local Government Superannuation
Acts, 1937-1953, and will be determinable by
one month's notice, in writing, on either side.
The successful candidate will be required to pass
a medical examination.

Relationship to any member or Officer of the
Council must be disclosed and canvassing directly
or indirectly will disqualify.

Applications, stating age, qualifications and
experience, together with the names and addresses
of two referees, should be sent in an envelope
endorsed "Architectural Assistant" so as to
reach the Engineer & Surveyor at these offices
not later than Friday, 3rd June, 1960.

A. LANCASHIRE,
Clerk of the Council.

Council Offices,

Shenley Road,

Boreham Wood, Herts.

10th May, 1960.

1211

COUNTY BOROUGH OF BLACKPOOL

Applications are invited for:

ASSISTANT ARCHITECTS, Special Scale, £785-
£1,070 p.a.

ASSISTANT QUANTITY SURVEYORS, Special
Scale, £785-£1,070 p.a.

Forms, etc., from Arthur Hamilton, B.Sc.,
A.R.I.B.A. (Borough Surveyor), P.O. Box 17,
Municipal Buildings, Blackpool.

9745

UNIVERSITY OF ADELAIDE
FACULTY OF ARCHITECTURE AND TOWN
PLANNING

Applications are invited for the following appointments:

READER IN ARCHITECTURE AND TOWN
PLANNING

LECTURER IN ARCHITECTURE.

Salary scales: Reader, £2,560—£4,600—£4,200; Lecturer, £1,500—£1,800—£2,000; with superannuation on the F.S.S.U. basis. These scales are under review and will, it is expected, be increased in 1961.

General conditions of appointment and a statement about the posts for the information of potential candidates may be had on application to the Registrar or to the Secretary, Association of Universities of the British Commonwealth, 36, Gordon Square, London, W.C.1.

Applications, in duplicate, and giving the information listed in the final paragraph of the general conditions of appointment, should reach The Registrar, The University of Adelaide, Adelaide, South Australia, not later than June 15, 1960.

HERTFORDSHIRE COUNTY PLANNING
DEPARTMENT

SENIOR PLANNING ASSISTANT required as Group Leader of the Central Areas Group of the Development Plan Section. To be responsible for all town-centre plans and urban renewal schemes. Must be A.M.T.P.I. preferably with design experience.

Salary "Special" linked A.P.T. IV (£785 rising to £1,220 p.a.). Commencing salary according to qualifications and experience.

Five-day week. "Essential" motor-car allowance.

Application forms from: The County Planning Officer, County Hall, Hertford. To be returned by 28th May, 1960.

COUNTY BOROUGH OF SOUTHAMPTON
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following permanent posts:

(a) SENIOR QUANTITY SURVEYOR, Grade IV (£1,065—£1,220).

(b) SENIOR QUANTITY SURVEYOR, Special Grade (£785—£1,070).

Housing accommodation available in approved cases and approved removal expenses reimbursed up to a maximum of £50.

Applicants should possess appropriate qualifications. Commencing salary within grade according to experience and qualifications.

Application forms from the Borough Architect, Civic Centre, Southampton, returnable by 6th June, 1960.

WELLINGTON (NEW ZEALAND) REGIONAL
PLANNING AUTHORITY
POSITION OF REGIONAL PLANNING
OFFICER

Applications are invited for the position of Regional Planning Officer to the Wellington (New Zealand) Regional Planning Authority at a salary which will be fixed in the range of £1,400 to £2,000 per annum according to qualifications and experience. It is preferable that the successful appointee be a Member or Associate Member of the Town Planning Institute and have had wide experience in planning and development work.

Copies of Conditions of Appointment may be seen at the office of this newspaper or may be obtained from the Secretary, Wellington Regional Planning Authority, P.O. Box 2199, Wellington, New Zealand, with whom applications close on the 22nd June, 1960.

T. W. JAMES.
Secretary.

LONDON TRANSPORT EXECUTIVE
INVITES APPLICATIONS FROM
ARCHITECTS

for the following vacancies in the office of the Architect.

ASSISTANT ARCHITECTS, Salary range £1,020 p.a.—£1,185 p.a. Ref. F/EV 792/A.

Candidates must be fully qualified and capable of supervising staff.

ARCHITECTURAL ASSISTANTS, Salary range £855 p.a.—£1,028 p.a. Ref. F/EV 792/B.

Candidates should be qualified to R.I.B.A. Intermediate standard with previous office experience.

Appointments are subject to medical examination. Successful applicants will qualify for free travel and will be required to join a contributory superannuation fund after a probationary period. No Saturdays.

Applications quoting reference number of post applied for and giving age, qualifications and full details of previous experience should be sent to:

Staff and Welfare Officer,
London Transport Executive,
55 Broadway,
London, S.W.1. 1246

CITY AND ROYAL BURGH OF
DUNFERMLINE

SENIOR ASSISTANT ARCHITECT

Applications are invited for the above post on salary scale £845—£1,125 with placing according to age, qualifications, and experience. The post is superannuable, and subject to medical examination.

Applicants should be members of the Royal Institute of British Architects with at least three years' experience since qualification.

The successful applicant will be engaged on an interesting programme of traditional housing, redevelopment, and public buildings.

Applications stating age, experience, qualifications, and details of present appointment, together with copies of recent testimonials, to be lodged with the Burgh Architect, 6, Abbot Street, Dunfermline.

The post has been designated by the Town Council for priority housing.

J. DOUGLAS.
Town Clerk.

City Chambers,
DUNFERMLINE.
12th May, 1960. 1245

BIRMINGHAM REGIONAL HOSPITAL
BOARD

SURVEYING ASSISTANT (BUILDING). £625—£900. To assist in survey of existing hospital buildings and preparation of record plans. Inter-R.I.C.S. (Buildings Division) essential. Must be neat draughtsman with experience in measurement and plotting of surveys to all scales. Superannuable. Five-day week. Written applications (quoting Arch 4) naming two referees to Secretary, R.H.B., 10 Augustus Road, Birmingham, 15, by 7th June, 1960.

The LONDON COUNTY COUNCIL invites ARCHITECTS in private practice to apply for their names to be included in a NEW PANEL from which architects will be selected to undertake the design and erection of housing schemes.

Architects whose names have been included on previous panels and who wish to have them included on the new panel should make fresh application.

Application forms may be obtained from the Clerk of the Council (H/AJ/1276/5), The County Hall, London, S.E.1, and should be returned not later than 13th June, 1960.

GLENROTHES DEVELOPMENT
CORPORATION

Architects, with A.R.I.B.A., required for the design and construction of commercial and shopping premises, industrial buildings and housing. Salary grade rising to £1,375 per annum, with placing according to age and experience.

Houses to rent available if required. Medical examinations under Superannuation Scheme. Application forms from Secretary and Legal Adviser, Glenrothes Development Corporation, Glenrothes, Fife.

CUMBERLAND COUNTY COUNCIL

APPOINTMENT OF COUNTY ARCHITECT

Applications are invited for the appointment of County Architect for the Administrative County of Cumberland.

Salary within the scale £2,550 (1 x £115); (2 x £110)—£2,885 per annum.

Application forms, together with further details, may be obtained from the undersigned to be returned not later than Wednesday, 8th June, 1960.

G. N. C. SWIFT.
Clerk of the County Council.

The Courts,
Carlisle.
10th May, 1960. 1222

LANCASHIRE COUNTY COUNCIL

Applications are invited for the permanent appointment of ASSISTANT ARCHITECTS within the Salary Scale £750—£1,070. There is a large and varied programme and the successful applicants will be encouraged to deal with smaller projects from sketch plans to completion, and assist more Senior Architects on major projects. A wide experience will be gained and opportunities afforded by the promotion scheme within the office.

Forms of application and details on the organisation of the Department may be obtained, on application, from the County Architect, P.O. Box 26, County Hall, Preston. 1197

CORPORATION OF LONDON
CITY PLANNING OFFICE

has vacancies for PLANNING ASSISTANTS—salary scale £915 to £1,220 in Civic Design Section, point of entry to scale dependent on experience and qualifications.

This Section is engaged primarily in design of large (e.g., Barbican, Tower Hill) and small scale redevelopments in the City of London, and guiding applicants under the Town and Country Planning Acts. General drawing office work, modelling, and advertisement control work also undertaken.

Applicants should be qualified architects with a sound approach to design problems, and good draughtsmen. Planning experience or training an advantage.

Local Act Superannuation. Medical examination.

Applications, with details of age, training, experience, present salary, and copies of two recent references to City Planning Officer, Guildhall, E.C.2, within 14 days.

APPLICATIONS are invited for the post of LEADING ASSISTANT ARCHITECT in the office of the Architect, Eastern Region, at King's Cross Station. Applicants must be qualified with well developed abilities in contemporary design and administration and should have had several years' practical experience in a responsible position. Salary range £1,095—£1,200. The office is engaged on a wide range of interesting buildings. Modern working conditions. 5-day week, rail travel concessions. Apply in writing to the Architect, British Railways, Eastern Region, King's Cross Station, London, N.1. 1259

LANCASHIRE COUNTY COUNCIL

ARCHITECTURAL ASSISTANT required at PRESTON, salary Special Scale (£785—£1,070).

Applicants should be qualified architects, planning experience is desirable but not essential. Duties include the design of housing layouts and central area redevelopment schemes, and the preparation of working drawings for houses, flats and shops.

Applications, giving age, qualifications, present appointment, experience, etc., and two referees, to the County Planning Officer, East Cliff County Offices, Preston, by the 25th May, 1960. 1161

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FARMER
& SON LIMITED

FABRICATORS IN STEEL

STAIRWAY HOUSE, COURTHILL ROAD, LEWISHAM LONDON S.E.13. PHONE: LEE GREEN 4334-9.

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CITY OF CHESTER

DEPARTMENT OF CITY ENGINEER.
Applications are invited for the post of SENIOR ARCHITECTURAL ASSISTANT, salary within the A.R.I.B.A. Special Grade scale. Candidates should have passed the R.I.B.A. final examination and should have had good training and practical experience of a general nature. Housing accommodation will be available to the successful applicant if required. Applications giving the names of two persons to whom reference can be made should reach the City Engineer, 49, Northgate Street, Chester, by 30th May, 1960. 1283

CITY OF CANTERBURY

ASSISTANT ARCHITECT.—A vacancy exists in the City Architect's Department. Commencing salary within the grade £765—£1,070, according to qualifications and experience. Applicants should have had varied experience and be capable of good detailing and presentation. Housing accommodation will be made available, if required. Applications, with the names of two referees, must reach the City Architect & Planning Officer, John L. Berbiers, F.R.I.B.A., A.M.T.P.I., not later than 3rd June, 1960. Canvassing will disqualify.

J. BOYLE
Town Clerk.
Municipal Buildings,
Canterbury. 1192

BURGH OF HAMILTON

ASSISTANT ARCHITECT
Applications invited from Associates of the Royal Institute of British Architects (or equivalent qualification) with experience in post-war housing and civic building design, etc.—Super-annuable—Salary £795—£1,075. Tenancy of house available if required.

Applications, containing full particulars of age, qualifications and experience, with names of three referees, to Burgh Architect, 56 Brandon Street, Hamilton, by 30th May. Canvassing, directly or indirectly, disqualifies.

1236

Tenders Invited

36s. per inch; each additional line, 3s.
including forwarding replies 2s. extra

BOROUGH OF OLDBURY
STONE STREET AND LODGE STREET
DEVELOPMENT—PHASE 2.

The Council invite Tenders on a fixed-price basis for the erection of 75 four-storey dwellings and four garages, together with landscape wall and construction of drying areas.

Forms of Tender. Conditions of Contract and Bills of Quantities may be obtained from the Architects, Messrs. Wood & Kendrick & Williams, of 57, Colmore Row, Birmingham, upon payment of a deposit of £2 2s. 0d. This sum will be refunded on receipt of a bona fide tender not subsequently withdrawn.

Tenders must be submitted in the envelope provided, the envelope being duly sealed and bearing no name or mark indicating the sender. Tenders must be delivered to the Town Clerk's Office not later than 12 noon on 4th June, 1960. The Corporation does not bind itself to accept the lowest or any tender.

KENNETH PEARCE.
Town Clerk.

Municipal Buildings,
Oldbury.
May, 1960. 1178

Architectural Appointments Vacant

3s. per line; minimum 12s. Box Number,
including forwarding replies, 2s. extra

TWO ARCHITECTURAL ASSISTANTS required—Intermediate R.I.B.A. standard—those who have had good office experience. Salary £600—£1,000 according to experience. Housing accommodation could be provided. Reply, giving particulars of age and experience and salary required, to: Francis W. Keyworth, L.R.I.B.A., 29, Park Road, Melton Mowbray, and 31, Friar Lane, Leicester. 8776

ARCHITECTURAL ASSISTANTS required in A busy Bloomsbury office with varied practice. Good salary and prospects for suitable applicants. Five-day week. Write giving particulars of age, qualifications, experience, etc., to Box 910, c/o 7, Coptic Street, W.C.1. 8815

ASSISTANT ARCHITECTS required by firm with offices in Middlesbrough and Billingham-on-Tees. The work is interesting and of considerable variety. Salary according to experience and ability. Ede and Lester, A.R.I.B.A., Grosvenor Buildings, 65, Albert Road, Middlesbrough. 8820

RONALD WARD & PARTNERS have immediate vacancy for ASSISTANT ARCHITECTS with initiative and some experience, for interesting, commercial, industrial and civic projects. Salaries commensurate with ability. Apply, 29, Chesham Place, S.W.1. BELgravia 9361.

ELIE MAYORCAS requires SENIOR ASSISTANTS with minimum of three years' office experience in this country. Write, giving particulars of architectural education and experience, and salary required, to: 13, David Mews, Baker Street, W.1. 8089

ASSISTANT ARCHITECT required by Hasker & Hall, L.R.I.B.A., for responsible position in their London office, 13, Welbeck Street, W.1. (WEL 0061.) 9061

W. H. WATKINS, GRAY & PARTNERS require ASSISTANTS of Intermediate and Final standard. Pension scheme and luncheon vouchers. Salary range £700 to £900. Apply 67, Catherine Place, London, S.W.1. 8720

LARGE SCALE Development in London and Industrial Buildings in Home Counties, High office blocks and residential flats. Four ASSISTANT ARCHITECTS required. Senior and Intermediate standard, West End Office. Five-day week. Good salaries and bonuses. Box 8086

L. LEWIS SOLOMON, KAYE & PARTNERS, a rapidly expanding practice require ARCHITECTS and ASSISTANTS with initiative and competence to work on major design projects in the London area. These projects include Comprehensive Development Schemes, Hotels, Schools, Offices, and Luxury Flats. Good salaries according to ability and experience, luncheon vouchers, five-day week, and excellent working conditions. Write 5, Holborn Circus, Thavies Inn House, E.C.1, or telephone CITY 8811, quoting SLB in both instances. 7760

DEVEREUX & DAVIES require capable and enthusiastic ASSISTANT ARCHITECTS salary £1,000 per annum or according to experience and ability. 3, Gower St., Bedford Sq., London, W.C.1. 8629

ARCHITECTURAL ASSISTANT required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20, Bedford Square, London, W.C.1. 7822

ARCHITECTURAL ASSISTANTS, senior and junior, required by firm in High Wycombe for commercial and industrial schemes. Scope for responsibility and experience. Five-day week. Box 9143.

TWO ASSISTANTS required: one at Intermediate standard and one qualified with some years' office experience, for small busy office. Salary according to experience. Ring LANingham 1732 or write to F. G. Frizzell, A.R.I.B.A., 80, Portland Place, W.1. 8022

MONRO & PARTNERS require ARCHITECTURAL ASSISTANTS of Intermediate/Final R.I.B.A. standard in their London, Watford, and Glasgow Offices for work on interesting industrial and commercial projects. Salary range £800—£1,000 p.a. Non-contributory Pension Scheme. Five-day week. Apply in writing to 32, Clarence Road, Watford. 8899

SEELY & PAGET have immediate vacancy in their City office. Standard near Final R.I.B.A. with office experience. Holiday arrangements respected. Salary range £842 x £52 (4)—£1,050 plus luncheon vouchers. Write 41, Cloth Fair, E.C.1, or telephone MET 8511. 9155

FOUR-DAY WEEK. Opportunity for Juniors and/or post Intermediate Students to keep abreast with their school work and undertake interesting and varied office work including Schools, Hospitals, and Public Houses. Good salary according to qualifications and experience. Five-day working and overtime when desired, luncheon vouchers. Appointment by telephone: ROYAL 6216. Stewart Hendry & Smith, F.R.I.B.A., A.M.T.P.I., 90, Fenchurch Street, E.C.3. 9095

TREHEARNE & NORMAN, PRESTON & PARTNERS have vacancies for ARCHITECTS and ASSISTANTS with imagination and designing ability to assist with important new developments in the London area. Apply in confidence to 83, Kingsway, London, W.C.2. (HOL 4071.) 6429

ARCHITECTURAL ASSISTANTS of Final or Intermediate standard required by London Architects with varied practice. Salary by arrangement. Five-day week. Ring WHI 2552 for interview. 9406

NORMAN & DAWBARN require experienced ARCHITECTS for interesting projects both here and overseas. Applicants should be interested in good design. Salaries from £900 upwards. Phone or write for an appointment to: 7, Portland Place, W.1. 9504

ARCHITECTURAL ASSISTANTS required by Hasker & Hall, L.R.I.B.A., in their offices in London and Warwickshire. Good salary, with scope for initiative and responsibility. Write to 13, Welbeck Street, W.1, or telephone WEL 0061 or Knowle (Birmingham) 3502. 9062

BUSY City Firm engaged in industrial and commercial work requires ASSISTANT OF Final standard with several years' office experience. Five-day week. Luncheon vouchers. Salary by arrangement. Box 9227.

£1,000/£2,000 p.a. will be paid to experienced competent ARCHITECTS by a private practice in the City of London. The work will be primarily on the drawing board on new and interesting projects of magnitude. A high standard of design and detailing ability is required. Please apply in writing to Box 9360. 9469

EXPANDING practice with varied work in different parts of the country, require keen and capable Intermediate standard ASSISTANTS. Good salary and prospects for the right men. Holiday commitments honoured. Dalling and Partners, 14, Bloomsbury Square, W.C.1. CHANCERY 4725.

TRIPE & WAKEHAM, Chartered Architects, require a SENIOR ASSISTANT to supervise construction of interesting and important project abroad. Salary by arrangement. Telephone WELbeck 7744 or write to 16, Fitzhardinge Street, London, W.1, for an appointment. 9444

TRIPE & WAKEHAM, Chartered Architects, require ASSISTANTS in all grades to work in their London office on interesting projects both in this country and abroad. Salary by arrangement. Telephone WELbeck 7744 or write to 16, Fitzhardinge Street, London, W.1, for an appointment. 9443

ARCHITECTS and ASSISTANT ARCHITECTS required for interesting commercial, industrial and civic projects. Responsibility and initiative encouraged. Five-day week, good salary commensurate with ability and experience. Ronald Ward & Partners, 29, Chesham Place, S.W.1. BELgravia 5561. 9245

£750—£1,000—KEEN YOUNG ARCHITECTS WANTED URGENTLY. Senior and Junior Assistants required to work on a variety of interesting contracts, including flats, hospitals, offices, hotels, shops and interiors, etc. Opportunities for modern design and control of contracts. Salaries as above or according to experience. R. Mountford, Pigott & Partners, South Kensington. Tel. KENSington 1242. 9543

ARCHITECTURAL STAFF, all grades, required for interesting work. Good salary, bonus, superannuation scheme. House Purchase Assistance Scheme. Excellent working conditions, five-day week. Please apply, giving details of qualifications, experience and salary required to: George Brown & Partners, A.R.I.B.A., F.I.A.S., and Eric Ross, F.R.I.B.A., Equity & Law Building, Baldwin Street, Bristol, I. 9458

C. H. ELSOM & PARTNERS require ASSISTANTS for work on theatres, laboratories, shops, stores and town centre redevelopment, etc. Apply 10, Lower Grosvenor Place, S.W.1. VIC 4304. 9584

ARCHITECTS. SENIOR ARCHITECTURAL ASSISTANTS required immediately for a wide variety of work. Application should be made in writing to Kenneth F. Masson, A.R.I.B.A., Chief Architect, S.C.W.S. Ltd., 76, Morrison Street, Glasgow, C.5. 9677

ARCHITECTURAL ASSISTANT required for small office with varied practice. Apply giving details of experience and salary desired to Caroe & Partners, 16, Great College Street, Westminster. 9751

ARCHITECTURAL ASSISTANT required, Intermediate standard, small office, varied practice. Initiative appreciated and opportunity for advancement. Write or phone: Nicholson & Rushton, 2, New Square, Lincoln's Inn, W.C.2. HOLborn 2095. 9753

ARCHITECTURAL ASSISTANTS required. A probationer up to Intermediate R.I.B.A. level, or Students R.I.B.A. Facilities given for study of design at London Schools. Hare & Pert, A.R.I.B.A., 29, Elm Street, Ipswich. 9761

ARCHITECTURAL ASSISTANT, about Intermediate standard, required for general practice in North Devon Office. Pension scheme. Box 9744.

INTERMEDIATE to Final ASSISTANTS required immediately. Salary according to ability and experience. Theo. H. Birks, 38, Portland Place, London, W.1. LAN 7236. 9739

BRIGHTON
SENIOR ASSISTANT ARCHITECT of proved design and technical ability required to work largely on own initiative with team engaged on multiple projects in United Kingdom and Overseas. 35-hour week. Pension Scheme. Salary by arrangement. Gotch and Partners, 26, Regency Square, Brighton. 9726

BRIGHTON, BOURNEMOUTH OR LONDON
UP to £1,000 per annum offered to experienced ARCHITECTURAL ASSISTANTS to work on multiple projects in United Kingdom and Overseas. 35-hour week. Pension Scheme. Reply to: Gotch and Partners, 26, Regency Square, Brighton. 9726

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INTERMEDIATE standard ASSISTANTS of all-round ability needed for progressive positions engaged upon wide variety of work both here and abroad. 35-hour week. Reply to: Gotch and Partners, 26, Regency Square, Brighton. 9727

BASIL SPENCE & PARTNERS require qualified and experienced ARCHITECTS to fill positions of responsibility on a major building programme. Write to 48, Queen Anne Street, W.1, stating experience and salary required. 9824

BRYAN & NORMAN WESTWOOD & PARTNERS require JUNIOR ASSISTANTS to work in their new branch office at Weybridge. Please apply to 21, Suffolk Street, S.W.1. TRaffic 4411. 9914

JOHN AND SYLVIA REID require ASSISTANT ARCHITECTS with a good educational background and at least 3-4 years' office experience. Must be keenly interested in all aspects of design including furniture, domestic equipment, exhibitions, etc. Only those who are conscientious and welcome responsibility need apply. Please reply in handwriting stating age, qualifications, experience and salary required to 88, Talbot Road, Highgate, N.6. 9914

WHY NOT THE BEST OF TWO WORLDS? Pairs of ASSISTANTS required. Intermediate-Final grade, to work six months in London and six months in East Africa. Current salaries and overseas allowances. Telephone: GROsvenor 3668/9. 9967

ENTHUSIASTIC ASSISTANTS, who are interested only in work, money and prospects need apply to H. A. Halpern & Associates, 26a, High Street, Chatham, approaching Final standard, starting at £700 p.a. 9954

SENIOR AND INTERMEDIATE STANDARD ARCHITECTURAL ASSISTANTS required for London and Weston-super-Mare. Write full particulars including salary required. R. H. Galliannaugh, L.R.I.B.A., 54, Queen Anne Street, London, W.1. 9948

PATRICK Gwynne requires further ASSISTANTS in salary range £700-£900 for work on houses and interiors. The Homewood, Esher, Surrey. Tel. Esher 3510. 9931

NO pension, no lunch vouchers. Although old-established this is a young office, small enough to retain an individual family character while nevertheless being extremely busy on good quality work of all kinds from Liverpool to the South coast and from 1 to 17 storeys. Several challenging jobs urgently await able ASSISTANTS with enthusiasm for clean design and, when necessary, the ingenuity to construct the impossible. Salaries by arrangement. Write or phone James & Bywaters, 5, Bloomsbury Street, W.C.1 (Museum 9952/3). 9988

OSCAR GARRY & PARTNERS require ASSISTANTS of Intermediate and Final standard. Salary according to office experience. Please ring for appointment. WELbeck 2507-8-9. 9911

ASSISTANTS required, some experience in shops essential. Apply stating experience and salary required to: Stanley R. Nevel & Partners, 34, Smith Square, S.W.1. ABBey 3971. 9907

ASSISTANT ARCHITECT wanted in new Chelmsford office by well established London firm, age 22/35. Intermediate standard at least. Salary range £500-£550 according to qualifications. Interesting and varied work Home Counties and London area. Apply Gunton & Gunton, Empire House, St. Martin's le Grand, London, E.C.1. 9886

ROBERT MATTHEW & JOHNSON MARSHALL have vacancies for experienced ASSISTANTS to work in their London office on a number of interesting projects. Applications should be made in writing to 24, Park Square East, London, N.W.1. 9873

NORTH LONDON. Established practice requires ASSISTANT, R.I.B.A. Intermediate standard. Principally industrial and commercial work. Five-day week. Please send full particulars and salary required to C. E. Owen Ward, L.R.I.B.A., Midland Bank Chambers, Aldermans Hill, Palmers Green, London, N.13 (telephone PAL 1186/7). 9882

ARCHITECTURAL ASSISTANTS required. A qualified and unqualified. Salaries by arrangement. After qualifying period a Bonus Scheme is in operation, together with a non-contributory pension and life assurance scheme. Telephone CHAncery 3526 for appointment or write Woodroffe, Buchanan & Coulter, 5, Bedford Row, W.C.1. 9876

LOUIS DE SOISSONS, PEACOCK, HODGES & ROBERTSON have immediate vacancies in their London office for SENIOR AND JUNIOR ASSISTANTS. Write stating age, salary and experience to the above at: 3, Park Square Mews, Upper Harley Street, N.W.1. 9871

LOUIS DE SOISSONS, PEACOCK, HODGES & ROBERTSON have immediate vacancies in their Welwyn Garden City office for SENIOR AND JUNIOR ASSISTANTS. Write stating age, salary and experience to the above at: Midland Bank Chambers, Welwyn Garden City, Herts. 9872

CLIFFORD CULPIN, 39, Doughty Street, W.C.1, requires at once a SENIOR MAN to take responsibility throughout all stages of important projects. Starting salary £1,000 to £1,150 according to experience. Full holiday this year. Phone or write for appointment CHA 5395. 9863

CLIFFORD CULPIN, 39, Doughty Street, W.C.1, requires at once post-Intermediate ARCHITECTURAL ASSISTANTS to work on all stages of a wide variety of projects including an important Civic Centre in the modern idiom. Commencing salary £800-£950 p.a. and opportunities for rapid advancement to keen men with a sense of responsibility. Full holiday this year. Write or phone CHA 5395 for appointment. 9864

GRAHAM CRUMP & DENIS CRUMP, F.R.I.B.A. require ARCHITECTURAL ASSISTANTS in Croydon office. Intermediate standard with several years' office experience. Interesting and varied work. Two weeks' holiday this year. Salary £600-£800 according to abilities. Five-day week. Write giving full particulars to: 43, George Street. 9855

CO-OPERATIVE WHOLESALE SOCIETY LTD., Architects' Department, Manchester. ARCHITECTURAL ASSISTANTS, both Final and Intermediate standard, required to assist on interesting and varied development programmes. Five-day week. Pension Scheme. Applications stating age, experience, qualifications and salary required to G. S. Hay, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society Ltd., 1, Balloon Street, Manchester 4. 9981

ARCHITECTS, QUALIFIED, required to work in small design groups on interesting development schemes in Birmingham and other cities throughout the United Kingdom. Good opportunities in an expanding practice with offices in Birmingham and London. Progressive salary scales, incentive bonus scheme, luncheon vouchers, five-day week, and three weeks' holiday. Flat accommodation available in Birmingham. J. Seymour Harris & Partners, 3-4, Greenfield Crescent, Birmingham, 15. Tel. EDGbaston 4571. 1028

ARCHITECTURAL ASSISTANTS with some experience required to work in design/construction groups on interesting redevelopment schemes in Birmingham and other cities throughout the United Kingdom. Good opportunities in an expanding practice with offices in Birmingham and London. Progressive salary scales, bonus scheme, and holiday in accordance with service, luncheon vouchers, five-day week. Flat accommodation in Birmingham. J. Seymour Harris & Partners, 3-4, Greenfield Crescent, Birmingham, 15. Tel. EDGbaston 4571. 1029

ARCHITECTURAL ASSISTANT.—Applications are invited from qualified persons for permanent and progressive position in the Architect's Department of the Royal Arsenal Cooperative Society, Woolwich. Sound knowledge of construction and experience in surveys and preparation of working drawings for shop, office and industrial buildings, shopfittings, etc., essential. Five-day week. Superannuation Scheme in operation. Salary £689-£819 per annum according to experience. Apply, giving age, experience and qualifications, to The Staff Manager, 71, Powis Street, Woolwich, S.E.18. 9990

AGLAN SQUIRE & PARTNERS require all grades of ASSISTANTS for work of national importance in Reading area. Apply in writing to: 3, Hobart Place, S.W.1. 1016

POWELL AND MOYA require ARCHITECTURAL ASSISTANTS of all grades. Opportunity to work on new hospital schemes from early stages. Applicants should write to 36, Great Smith Street, London, S.W.1, stating age, training, experience and salary required. 1015

QUALIFIED OR NEAR QUALIFIED ASSISTANT required for medium sized office in pleasant surroundings. Experience in the design of houses and flats an advantage. Pension scheme, canteen facilities, car allowance, possibility of housing. Salary in range of £1,000 to £1,300 according to experience. Apply, giving particulars of experience and stating present salary, to Selby J. Clewer, F.R.I.B.A., Bournville Village Trust, Oak Tree Lane, Birmingham, 30. 1014

PROGRESSIVE and busy practice with a wide range of domestic and commercial development require the following Assistants:—

QUALIFIED OR SENIOR ARCHITECTURAL ASSISTANT. £1,100-£1,200 according to experience.

INTERMEDIATE OR JUNIOR ARCHITECTURAL ASSISTANT. £700-£800 according to experience.

Contemporary outlook preferred.

After an initial period a profit sharing basis may be introduced. Will be required to work at Camberley, Surrey.

Also:

QUALIFIED ARCHITECT—£1,250. After probationary period will be required to manage office on a profit sharing basis. For Haslemere Office. John M. Ramsay, A.R.I.B.A., Lloyds Bank Chambers, Haslemere. (Tele. 2286.) 1013

CHANNEL ISLANDS—SENIOR ASSISTANT required in an established and expanding practice in Jersey. Applicants should have had several years' experience, and must be capable of taking charge of a small drawing office under the resident partner and of running contracts. Possibilities of profit-sharing and ultimate partnership for the right man. Interviews can be arranged in London or Southampton. Write giving full particulars to John H. Saunders, L.R.I.B.A., F.R.S.A., at 22, Brunswick Place, Southampton. 1012

FIRST ASSISTANT required to help two busy partners and secretary, holiday arrangements respected. Ring Holborn 5101. 1127

APPLICATIONS are invited for the post of ARCHITECTURAL ASSISTANT, Intermediate R.I.B.A. standard, in busy office engaged on varied work: five-day week. Salary commensurate with experience and ability. Quicke & Lee, Chartered Architects, 11, Waterloo Place, Leamington Spa, Warwickshire. 1096

UP to £1,200 per annum with Bonus Scheme and Luncheon Vouchers offered to qualified conscientious SENIOR ARCHITECTS. Only those confidently capable of designing and carrying out projects from sketch plans to final accounts need apply. There are excellent prospects for the right persons. Applications should be made in writing in the first instance, stating age, experience and qualifications, to: W. Rossell Orme & Partners, 55, Manchester Street, London, W.1. 1103

ARCHITECTURAL ASSISTANTS, post-Intermediate or Final standard, required in busy London Architects' Office, to work on varied projects of interesting nature. Salaries up to £1,000 per annum with Bonus and Luncheon Vouchers are offered to those who are keen and conscientious. Applicants should write, stating age, experience and training, to: Box 1104.

ARCHITECTURAL ASSISTANT required for a busy West End office. Salary according to age and experience. Apply to Maurice Sanders, F.R.I.B.A., 24, Harley Street, W.1. 1101

THE LAING HOUSING COMPANY INVITES applications for the following vacancies in their Head Office at Queensbury:—

ARCHITECTURAL ASSISTANT for varied and interesting domestic design and detailing. Intermediate R.I.B.A. or equivalent. **ASSISTANT QUANTITY SURVEYOR** for taking-off, estimating, site measurement and interim valuations. Intermediate I.Q.S. or equivalent.

These positions are permanent and pensionable. Salary commensurate with qualifications and experience. Assistance given to those studying for a recognised qualification. Sports and Social Club facilities. Applications in writing to Personnel Manager (H.6.), John Laing and Son (Holdings) Limited, London, N.W.7. 1094

FIRM of the future taking its way to fame in the oldest house in Bloomsbury Square, requires a stalwart ASSISTANT to join it in coming glory. Holidays 1960 assured. Dalling and Partners, 14, Bloomsbury Square, W.C.1. CHAncery 4725. 1088

SENIOR and INTERMEDIATE ARCHITECTS required by busy City office; every opportunity for initiative and responsibility; varied practice. Five-day week. Salaries by arrangement and commensurate with experience. Kenneth Lindy, Joseph Hill & Partners, 24, St. Mary Axe, E.C.3. 1086

APPLICATIONS are invited to fill posts as **ASSISTANT ARCHITECTS**. Five-day week. Compulsory Superannuation Scheme. Salary range £750-£1,080 per annum. Apply: W. J. Reed, F.R.I.B.A., Chief Architect, C.W.S. Ltd., 99, Leman Street, London, E.1. 1085

EXPERIENCED SENIOR ASSISTANT ARCHITECT required in Architect's Department of commercial firm in the West Riding of Yorkshire. Must be prepared to work on projects of varying size, also willing to travel throughout the country. Five-day week, Pension Scheme, canteen facilities. Salary by arrangement according to age and experience. Apply Box 1077.

ASSISTANT to Brewery Company Architect required. First class working conditions and good salary to young man with ability and initiative. Intermediate to Final standard. Previous Brewery experience not essential. Assistance with removal. Pension. Write to Company Architect, Groves & Whitnall Ltd., Regent Road Brewery, Salford, 5, Lancs. 1075

COOK, CULLING & ELLINGWORTH have a vacancy for experienced **SENIOR ASSISTANT ARCHITECT** in busy practice dealing largely with Industrial buildings. Candidates should have had at least five years' full time office experience. Apply: Meeting Lane, Gold Street, Kettering. 1067

QUALIFIED and JUNIOR ARCHITECTS required for varied practice. Salary according to qualifications and experience plus bonus on profits. Write Beecher & Stamford, F.R.I.B.A., 14, Park End Street, Oxford. 1065

ARCHITECTS and ASSISTANTS with good industrial experience required for work on major industrial developments. Good prospects in expanding organisation. Apply, stating age, qualifications, experience and salary required, to Box 1100.

ARCHITECTS AND ASSISTANTS required for work on interesting Industrial Project affording first-class design and technical experience. Apply in writing to: Sir William Halcrow & Partners, (B.A. Architects' Section), 47, Park Lane, London, W.1. 1110

INTERMEDIATE JUNIOR ASSISTANTS required for large office development and flats. Salary according to experience and capability. Write to A. Green, A.R.I.B.A., 23, Fitzroy Street, W.1. 1003

ARCHITECTURAL ASSISTANTS AND DRAUGHTSMEN with initiative required for interesting and varied work on major industrial projects. Architectural Assistants should be of Intermediate to Final R.I.B.A. standard with several years' experience and capable of preparing working drawings and specifications with minimum supervision. Draughtsmen should have a good training in modern building construction and have had at least four years' experience in an Architect's Office. Pension scheme, five-day week. Luncheon vouchers. Apply with full particulars to J. D. & D. M. Watson, 67, Tufton Street, Westminster, S.W.1. 1025

TOOLEY AND FOSTER require ARCHITECTURAL ASSISTANTS (preferably just qualified or soon to take R.I.B.A. Final) for responsible work in Essex practice ten miles from London. Unfurnished two-bedroomed flat available if required. Salary by arrangement in accordance with age and experience; five-day week; voluntary superannuation scheme. Apply by letter to Midland Bank Chambers, Buckhurst Hill, Essex, or phone BUC 2231. 9997

ASSISTANTS required at Beaconsfield, or Daventry. Apply H. Desmond Hall, Beaconsfield 1366. 1034

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SHINGLER & RISDON require **TWO SENIOR ASSISTANTS** and **FOUR ASSISTANTS** to take over the design and construction of important comprehensive developments. Salary by agreement. Holiday commitments recognised. Phone CHA 2951. 9996

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CROYDON.—**ARCHITECTURAL ASSISTANTS** required, Senior and Junior. Varied and interesting work: Schools, Hospitals, etc. Apply, stating age, experience and salary required, to George Lowe & Partner, 79, George Street, CROYDON 3608/9. 9992

ASSISTANT ARCHITECTS

DUE to the expansion of the Architect's Department in the Birmingham Headquarters of our large Building Organisation, the following Assistants are required for permanent pensionable positions under the control of our Staff Architect.

(a) **SENIOR ASSISTANT ARCHITECTS** (salary range £1,200 p.a.) with progressive thoughts on the design of Domestic, Industrial and Commercial projects, and capable of taking control as a Group Leader.

(b) **ARCHITECTURAL ASSISTANTS** (salary range £800 p.a.) capable of preparing full working drawings with a minimum of supervision.

Assistance with housing accommodation may be granted to the successful applicants at the Board's discretion.

For further information, forward brief particulars of qualifications and experience to:

J. Hughes Longstaff,
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C. Bryant & Son Ltd.,
Small Heath,
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WATKINS & PARK require **ASSISTANT ARCHITECTS** at Leigh-on-Sea and Basildon. Salary £750 or more according to experience. Five-day week. Modern outlook. Apply 13, Clay Hill Road, Basildon. Tel.: VANge 2040. 1061

Architectural Assistants required approaching or at Intermediate stage, in the Coventry area. Interesting development in Flat design. Up to £900 p.a. salary according to ability and experience. Write with full particulars to Box 1048.

£400 TO £800 salary per annum offered to young, keen **ASSISTANT** wishing variety in country private architectural practice. Please write, giving age and experience to Forsyth Lawson, Cunningham & Partners, Chartered Architects, 30, Horse Fair, Banbury, Oxford. 1047

TEATHER & HADFIELD, Chartered Architects, Mazda Buildings, Campo Lane, Sheffield, require **ASSISTANT ARCHITECTS** capable of taking charge of Contracts from sketch design to completion. Also **ARCHITECTURAL ASSISTANTS** up to Intermediate standard. Holiday commitments will be honoured. 1011

SIR PERCY THOMAS AND SON of Cardiff, Swansea and Shrewsbury, require experienced **ASSISTANTS** for all three offices.

Applicants should be qualified and experienced, with a sound knowledge of progressive design, and capable of exercising a high degree of responsibility.

Salaries range from £750 to £1,500 per annum, depending on experience, etc. Holidays are three weeks per annum, and every third Saturday morning is free.

Applications, stating age, qualifications and experience, should be made to the Secretary, at 10, Cathedral Road, Cardiff. 1008

DONALD ROWSWELL urgently requires capable **ASSISTANTS** of various grades for Croydon office. Salary by agreement. Holiday arrangements honoured. Apply with full details to 54, Friends Road, Croydon, or telephone CROYDON 4080. 1045

Architects require **ASSISTANT** for general practice in London. Would suit man with small practice wishing to join old established firm. Write stating age, training, experience, salary required and when free, to Box 1043.

JUNIOR ARCHITECTURAL ASSISTANT required by a world-wide organisation with Head Office in London. Applicants must be probationers approaching Intermediate standard or students of the R.I.B.A., and have had at least three years' experience in the preparation of working drawings and details. Apply in writing, giving full information to Personnel Officer, Cable and Wireless Limited, Mercury House, Theobalds Road, London, W.C.1. 1042

BRERY Architect's Department has a vacancy for experienced **ASSISTANT** approaching Final standard. Applicants for this permanent pensionable appointment should have a minimum of five years' office experience preferably with knowledge of licence work. Applications, with full particulars, to Fergus H. Frost, A.R.I.B.A., The Birkenhead Brewery Co. Ltd., 73, Oxton Road, Birkenhead. 1041

WHAT ARE YOU LOOKING FOR? A big programme and varied work An adventurous outlook on design As much responsibility as you can carry A top salary plus luncheon vouchers A share in profits and pension scheme A progressively longer annual holiday A secure job in an expanding practice

We offer all these to first class **SENIOR ASSISTANTS**. Phone HUN 1711 for an appointment to see our Office and to discuss joining us: Beard, Bennett, Wilkins & Partners 101, Baker Street, London, W.1. 1184

EXPERIENCED **ASSISTANT ARCHITECT**, with imaginative outlook and flair for good draughtsmanship, required in small expanding Knightsbridge office. Varied and interesting work, excellent prospects. Keen juniors also required. Phone: Belgrave 6167/7 for appointment. 1181

MANCHESTER. **ASSISTANT ARCHITECT** required to take charge of branch office shortly to be opened in City centre, varied and interesting projects including Hospitals. Excellent prospects for keen and energetic man. Box 1182.

PERSONAL **ASSISTANT** to principal required, good draughtsmanship essential, interesting projects, excellent prospects for enthusiastic man. London office. Box 1183.

URGENtly required. Intermediate and Senior **ASSISTANTS** small contemporary West End office. Salaries £800-£1,100 according to experience. Ring VICTORIA 7088 for appointment. 1179

MARLOW. Final standard **ASSISTANT** required. Write stating experience, training, salary, etc. John G. Fryman, 65, High Street, Marlow, Bucks. 1174

EXPERIENCED **ASSISTANT ARCHITECTS** of R.I.B.A. Intermediate standard required immediately for established firm on South Coast, for planning and detailing of modern factories and commercial development. Write stating age, experience and salary required to: Messrs. Thomas, Jolly, Grant & Kelsey, 26, Kent Road, Southgate, Hants. 1173

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SENIOR **ASSISTANT ARCHITECTS** AND **ARCHITECTURAL ASSISTANTS** required immediately by a progressive and expanding building and civil engineering organisation setting up an Architects' Dept. Applicants must have interest in good design, new techniques and materials and be capable of running own jobs. Interesting work both at home and abroad. Write in confidence stating age, qualifications and salary required to Box 1231.

Architectural Assistants, Senior and Intermediate grades, required for Shrewsbury Office. Apply by letter stating age, qualifications, experience and salary required to W. Elsworth, A.R.I.B.A., Castle Gates, Shrewsbury. 1213

Architectural Assistants required for a small busy practice. Intermediate to pre-Final standard, wide variety of work. Apply stating age, experience and salary required to Culnlie & Holt, 16, Rossall Road, Cleveleys. 1214

GRAVESEND & ROCHESTER. Opportunity in expanding Offices. Male or female **ASSISTANTS** required on wide variety of work. Pension Scheme. Salary up to £1,000 p.a. Evening interviews if required. Write or phone: George E. Clay & Partners, A.A.R.I.B.A., 198, Parrock Street, Gravesend. Tel: Gravesend 1401/2. 1215

Architect's Assistants required in Birmingham Office for preparation of working drawings, specifications, etc. Ability to drive a car an asset. Salary by arrangement. Five-day week. Telephone Birmingham Central 6139 or write Box 1217.

ASSISTANT of post-Intermediate standard required for educational work at home and abroad. Write to Frank Rutter, F.R.I.B.A., 60, Woodbridge Road, Guildford, Surrey. 1218

SENIOR ARCHITECTURAL ASSISTANT required by well-known Timber Fabrication Company in Farnborough, Hants. Applicants should be at least Final standard and able to take charge of expanding Drawing Office. Work will range from sketch designs to component and assembly drawings for a variety of building types. Good prospects for young, energetic man with drive and contemporary outlook. A sound knowledge of timber engineering would be an advantage. Salary range £850 to £1,000 according to experience. Send full particulars to Box 594, Dorland Advertising Limited, Haymarket House, 28, Haymarket, London, S.W.1. 1226

Architectural Assistants are required by the United Kingdom Atomic Energy Authority, Development and Engineering Group Headquarters, Risley, Warrington, Lancashire, to prepare working drawings and plans for a wide variety of industrial research laboratories and domestic buildings. Applicants must have had several years' training and experience in an architect's office and should preferably be of Intermediate R.I.B.A. standard. Salary between £458 (at age 21) and £915. Contributory superannuation. Staff housing scheme. Send postcard for application form, quoting reference 261/J.41, to Recruitment Officer at above address. Closing date: 30th May, 1960. 1162

LEATHERHEAD. Expanding country practice urgently requires responsible **SENIOR ASSISTANT** to work directly with sole partner on a wide variety of domestic, commercial and industrial contracts. Salary by arrangement, with reliability and a real interest in the day to day problems of trying to produce good building leading to possibilities of partnership. Write in the first instance to F. St. G. Higginson, A.R.I.B.A., 2, Bridge Street, Leatherhead, giving details of age, experience and present salary. 1219

RAGLAN SQUIRE & PARTNERS require Intermediate and Final standard **ARCHITECTURAL ASSISTANTS**. Please write stating age, experience and salary required to 3, Hobart Place, S.W.1. 1245

RICHMOND small private practice requires a **male ASSISTANT** of R.I.B.A. Intermediate standard with good office experience. Richmond 5412. 1244

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QUALIFIED **ARCHITECT** required for senior position in Head Office Architects Department. Able to take schemes from draft layout to completion. Five-day week. Superannuation. Apply Employment Officer, W. H. Smith & Sons Ltd., Strand House, Portugal Street, W.C.2. Tel: HOL 4343 Ext. 283. 1238

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Architectural Assistant, Intermediate standard, required in Architects Department of small Development Company in Beckenham engaged in the erection of houses, flats, service stations, etc. Salary £1725 per annum. Two weeks' holiday this year. Apply Box 1249.

Architects and **ASSISTANTS**. Telephone ANNO 4161, or write H. Anthony Clark, F. C. Roberts & Partners, 41, Regent Street, Wrexham, North Wales. Interesting variety of high standard work. Exercise of initiative and responsibility encouraged. Capabilities will be recognised by remuneration up to £1,000 p.a. 1250

Architects with extensive general practice (Churches, Hospitals, Schools, Flats, Commercial and Industrial) require experienced **ASSISTANTS**, post-Intermediate level or recently qualified. Ivor Day & O'Brien, 9, Clare Street, Bristol, L. 1251

Architectural Assistants required approaching or at Intermediate stage, with office experience. One day per week for studies. Write with details of education and experience. D. Plaskett Marshall, 59, Gordon Square, W.C.1. 1252

Architectural Assistant required for Head Office appointment. Permanent position with good salary, bonus scheme and entry into superannuation scheme after 12 months' service. Applicants should possess A.R.I.B.A. qualification or equivalent, and have experience in the design of Industrial structures. Write giving age, qualifications and details of experience to: The Mitchell Construction Company Ltd., Wharf Works, Peterborough. 1253

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PRE-FINAL **ASSISTANT** required in private practice. Varied work with opportunity to gain all round experience. Five-day week. Commencing salary £750 p.a. Geoffrey Shires, A.R.I.B.A., 69, Walton Street, Chelsea, S.W.3. Tel: KNIGHTSBRIDGE 8677. 1261

SENIOR ARCHITECTS, ARCHITECTS and ARCHITECTURAL ASSISTANTS required in all grades to work on a wide range of projects in an office that is continually expanding. Salaries will be commensurate with experience and qualifications. Permanent and progressive positions. Five-day week. Holiday commitments honoured.

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Should be Associates, R.I.B.A., and have some years' experience in one or more of the types of project listed below. They should be competent in project management.

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Projects in hand include:

Major Commercial developments in London and Provinces.

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Write, stating age, experience, and salary to Box 1276.

ARCHITECT'S ASSISTANT (Intermediate standard at least) required, capable of making site surveys, sketch plans, and working drawings. Non-contributory pension scheme. Annual bonus. Please apply giving details of salary required to David B. Jenkinson & Son, F.R.I.B.A., Imperial Buildings, Rotherham, Yorkshire. 1263

ASSISTANTS wanted, qualified and unqualified for varied work. Special consideration given to unqualified men of more mature years able to deal with alteration works. Naylor, Sale & Widdows, St. Mary's Chambers, St. Mary's Gate, Derby. 1266

J. M. AUSTIN-SMITH AND PARTNERS require fully qualified ARCHITECTURAL ASSISTANTS with office experience and the ability to design, run and supervise contracts on their initiative. Salary according to age (limit 35) and experience. Apply in writing to 29, Sackville Street, London, W.1. 1268

ARCHITECTURAL ASSISTANT required, minimum two years' experience. Please reply in writing, stating age, previous experience and salary required to Norman V. Hyde, B.A. (Arch.), A.R.I.B.A., 100, Hermitage Road, Hitchin, Herts. 1269

ONE pre- or post-Final ASSISTANT ARCHITECT required in progressive Bristol Office. Opportunities for design initiative and close teamwork in a variety of projects. Salary by negotiation. Apply in writing stating briefly background and experience to: Messrs. Whitchurch & Macfarlane, 14, Great George Street, Bristol, 1. 1270

ASSISTANTS required in busy Croydon office to assist on various large projects. Five-day week. State full experience and salary required. Box 1279.

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of a large contracting organisation in London engaged in widely varied types of work.

Applicants should have passed the R.I.B.A. Intermediate examination and should have at least three years' full time office experience, preferably with a private practice.

Salary will depend upon qualifications up to a maximum of £950 per annum.

Permanent appointments will qualify for inclusion in the organisation's superannuation scheme.

All communications will be acknowledged and treated as confidential. Please write to Box No. D1, 7810, c/o Whites, 72, Fleet Street, London, E.C.4, giving details of age, experience and qualifications. 1191

FARMER AND DARK have vacancies for:

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Wide variety of interesting projects both here and abroad; including Schools, Offices, Laboratories, Factories, Power Stations and Military Establishments.

Scope for people with initiative and ability.

Five-day week.

Holiday arrangements honoured and travelling expenses paid to those interviewed.

Please write or telephone: Romney House, Tufton Street, S.W.1. Abbey 6311. 1188

EAST MIDLANDS. ARCHITECTURAL ASSISTANT required, Intermediate or Final standard with good office experience, salary according to experience. Private country practice with some Local Authority work. Bonus scheme. Please apply giving details and salary required. A. C. Bishop, A.R.I.B.A., Market Square, Retford, Notts. 1266

COURAGE AND BARCLAY require ARCHITECTURAL ASSISTANTS and BUILDING SURVEYORS at their Head Office for schemes of redevelopment, modernisation and alterations to their licensed houses. Permanent positions with non-contributory pension scheme and five-day week offering considerable scope in carrying out schemes from inception to completion. Salaries from £900 upwards depending upon capabilities and experience. Previous experience in licensed premises desirable but not essential. Full particulars to Group Chief Architect, Horsleydown, London, S.E.1. 1204

ARCHITECTURAL ASSISTANTS, qualified and Intermediate standard, required for Glasgow Office. Excellent salary and prospects for suitable applicants. Box 1212. 1155

JUNIOR AND SENIOR ARCHITECTURAL ASSISTANTS required for offices in Cirencester, Moreton-in-Marsh and Wantage. Applications stating age, qualifications, experience and salary required to be made to:

Pyle and Saint,

Chartered Architects & Quantity Surveyors, Thomas Street House, Cirencester, Glos. 1210

RESEARCH and development work in relation to the design of buildings and building elements for factory production. Architectural staff of varying grades required for this work in consultant's office. Whilst there are the usual luncheon vouchers, superannuation, etc., we assume the people we are anxious to get will be more interested in the type of work. Will those who are, please apply to: A. M. Gear & Associates, 12, Manchester Square, London, W.1. 1208

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ARCHITECTURAL ASSISTANT, Intermediate A to Final standard, required for varied work in progressive Oxford office. Five-day week. Apply stating qualifications, experience and salary sought to Peter Bosanquet, 60, St. John Street, Oxford. 1196

RICHMOND. SENIOR ASSISTANT with R initiative and good practical outlook required for pleasant office, able to run Contracts under supervision of Partners. Work includes housing and commercial developments. Salary by arrangement. Write: F. Greenwood, A.R.I.B.A., 18, The Green, Richmond, Surrey. 1189

BIRMINGHAM. Bright young ARCHITECTS required as Assistants, qualified or in training, for medium size City Centre practice mainly concerned with varied commercial projects, salary range £700-£1,000 according to suitability and experience.

Apply: J. Alfred Harper & Son,

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ARCHITECTURAL ASSISTANTS INTERMEDIATE OR FINALS STANDARD required in

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INTERESTING and varied work. Five-day week, bonus, etc. Appointments permanent and superannuable.

Write (in confidence) stating age, experience and salary required to Personnel Manager, WATES LIMITED, London Road, Norbury, S.W.16. 9657

ARCHITECTURAL ASSISTANTS required, W.12 area. Box 1229.

ARCHITECTS in Midlands require permanent staff or part time assistance from suitable inter or final persons. Firm's present staff informed of advertisement. Financial consideration by mutual agreement. Box 1287. 1133

ARCHITECTURAL ASSISTANT, Intermediate A standard, required in West End office. Building surveys, working drawings and details for domestic, hotel and other varied projects. Apply with details of experience and salary required, etc., to Box 1289.

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Excellent opportunities in a responsible position, with commencing salary of £750-£1,000 according to experience and qualifications.

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ARCHITECT required by busy City practice £1,250-£1,400 p.a. to right man. Ring AVENUE 6153. 1151

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ASSISTANTS wanted, both qualified and unqualified, with some office experience, for interesting and varied work with responsibility. Write stating age and experience to Halliday & Agar, F.R.I.B.A., Chartered Architects, 4, Fountain Street, Manchester, 2. 1156

ASSISTANT ARCHITECT or SENIOR ARCHITECTURAL ASSISTANT required immediately. Varied and interesting work. Salary £600-£1,000 according to ability. Apply in writing to R. Lewis Reynish, F.R.I.B.A., Kent Lodge, Queen's Crescent, Southgate, Hants. 1157

ARCHITECTS (Birmingham & London) have A vacancies in salary grades £400-£550 and £700-£1,000 per annum. Interesting and varied programme of work. Senior grades carry three weeks' holiday with pay. Pension scheme. Write stating age, experience, qualifications and salary to Jackson & Edmonds, 116, Colmore Row, Birmingham 3. 1163

ARCHITECTURAL ASSISTANTS. Well known A London and Provincial Firm of Architects urgently require a number of Assistant Architects, chiefly for commercial and flat development schemes. Salary up to £1,000 according to ability and experience. Reply Box 1167.

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TOWN PLANNING AND PROPERTY DEVELOPMENT. Progressive Property Development Company require **ARCHITECT** or **SURVEYOR**, experienced in layout and formulation of development schemes. Must have first-class practical knowledge of town planning, particularly in connection with residential, shop, office and industrial schemes. Must have detailed knowledge and practical experience of negotiations in respect of both straightforward and complicated planning schemes and appeals. The position offered is a senior post with a growing organisation in the London area, offering excellent prospects for commencing salary and advancement. Write Box 1136.

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CHIEF ASSISTANT required immediately; varied and interesting work. Good salary and prospects. Flat available if required. Write giving full details to Antony Lamb, A.R.I.B.A., A.M.T.P.I., Ottery St. Mary, Devon. 1169

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ASSISTANT ARCHITECT, fully qualified, with experience in private practice, required by progressive office dealing in commercial, industrial and domestic architecture. Salary offered £1,000 p.a. upwards according to experience and ability. Please write giving full particulars to Edward Narracott & Partner, F.A.R.I.B.A., 48, Torward Street, Torquay. 1141

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TANTS**, Intermediate or above, required by London Architect who has moved to pleasant office near Wimbledon Common and is increasing staff. Five-day week, no town travelling. Interesting work in England and Nigeria. Write or telephone J. E. K. Harrison, F.R.I.B.A., Eagle House, High Street, S.W.19. WIM 4244. 1142

SDCUP, KENT. Interesting opportunity in small, busy practice (mainly industrial, commercial and domestic) for young qualified (or near) ASSISTANT with experience. Senior partner recently deceased. Only those willing and able to take responsibility need apply. Footscray 7008. 1144

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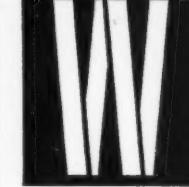
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4 0916
7 1055
6 0581
7 0602
4 0986
6 0614

6 0618
5 0866
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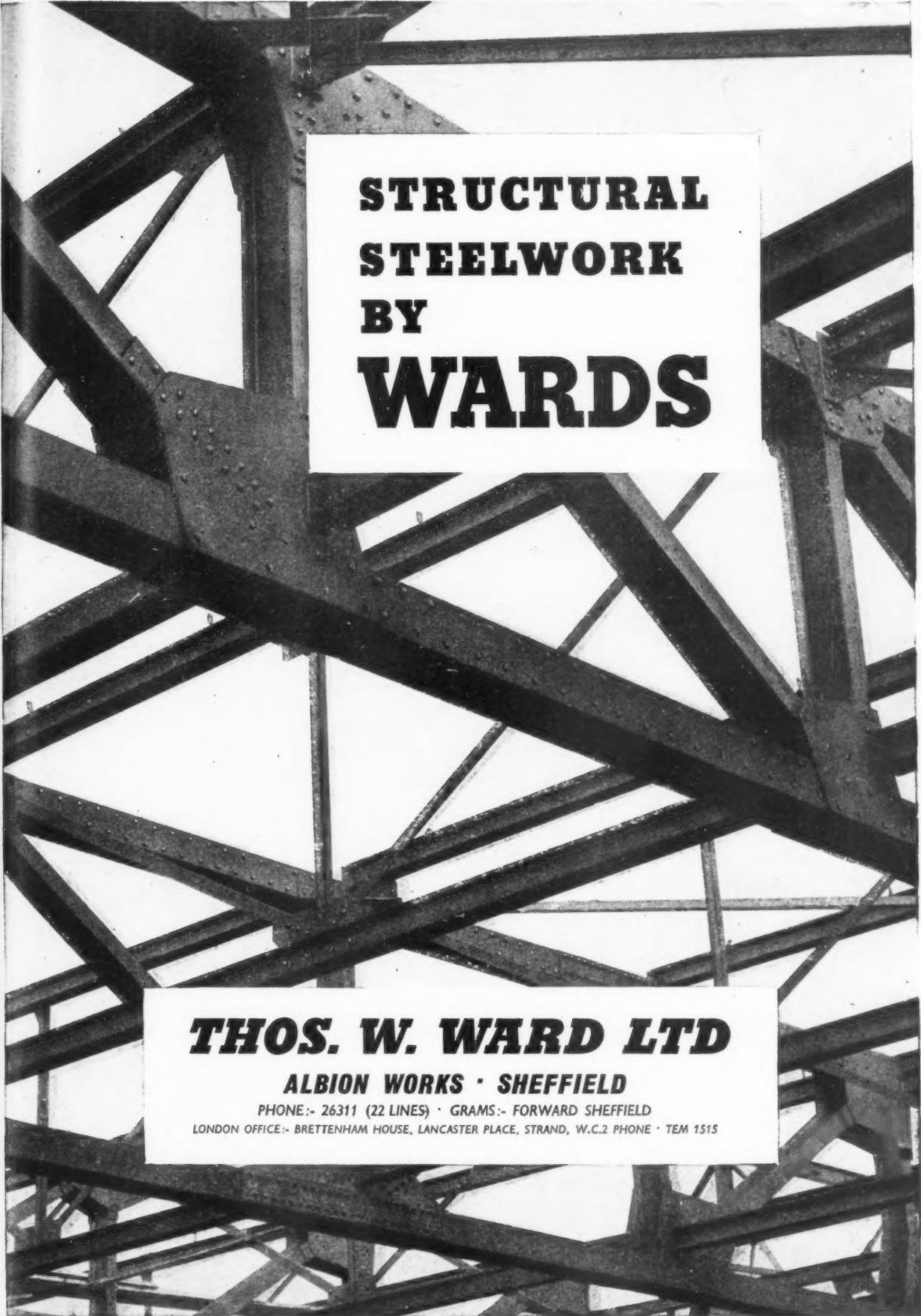
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4 0662

3 0669
5 0676
7 0677
1 0378
6 0683
9 0688
5 0693
7 0694

8 0708

7 0707





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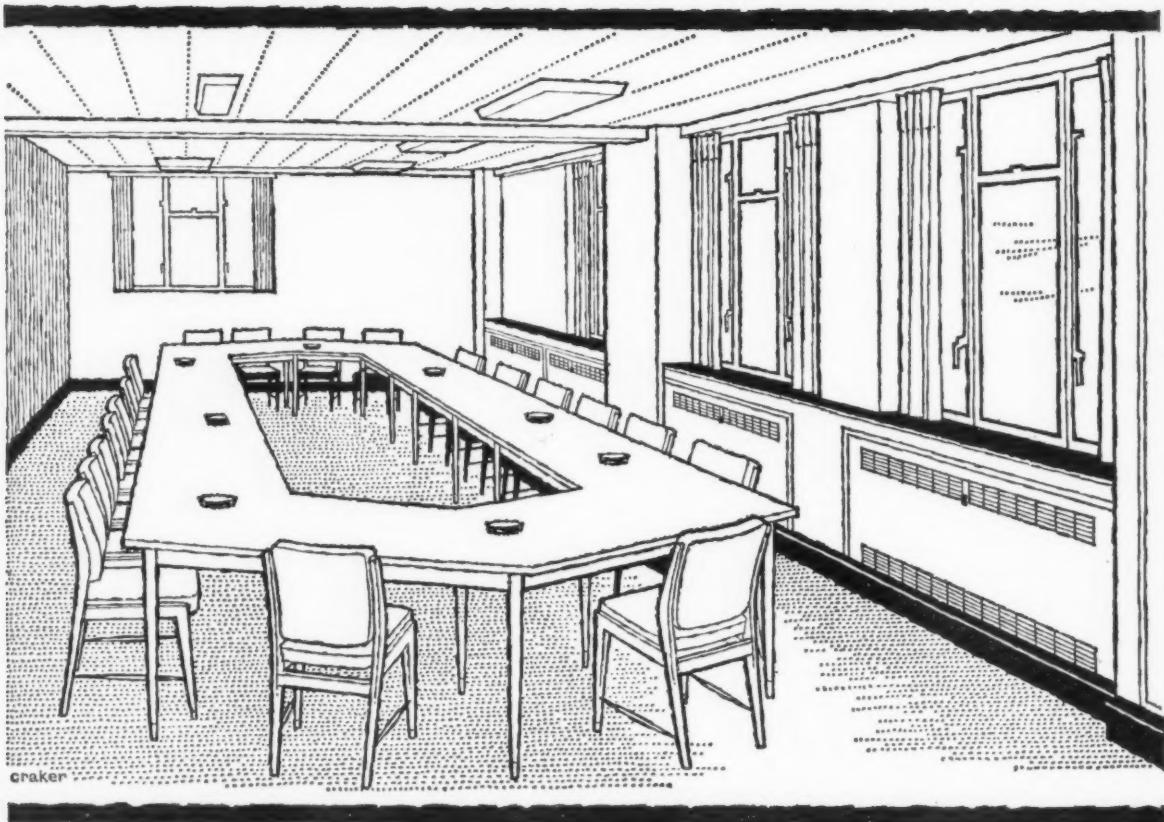
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